

# **SOUNDS OF FOOTBALL**

## **DESIGNING A SOUND LOGO FOR FC PORTO**

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# **Abstract**

This research study aims to develop a sound logo for Futebol Clube do Porto, which then builds a basis for sound identity. The documentation of this interdisciplinary field of marketing, sound design, music and neuroscience is primarily slim, and to accomplish the goals set in this project, a well-founded leitmotiv is defined, and similar areas of research therefore may assist to achieve not only answers to proof the hypothesis, as well to develop a sound logo for FC Porto. The further objective is to contribute a well-documented guideline for the implementation and production of the sound logo and its application. Likewise to serve further studies. Argumentation made in this thesis point out detailed literature review and figures. In order to sustain practical proceedings two case study are adopted to rely on their experience upon the development of acoustic communication in sports.

**Keywords:** Sound Branding, Corporate Sound, Sound Logo, Marketing of Sports, Brand Communication



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# **Part One - Introduction**

## 1. Preface

Audio branding, Sonic Branding, Sound Branding, Corporate Sound or Acoustic Branding. These are just some of many expressions for the audible illustration of a brand. Sound branding describes a process of brand development by the use of acoustic elements.<sup>1</sup> In the past years sound logos have raised its importance.<sup>2</sup> Today, sound is taking on a new dimension in marketing and communication. Especially in sports or football, respectively, where the technologic application, the modern stadiums and the general infrastructure enable the utilization of multimedia content including sound. Since unions and national football leagues have starting to trade with the broadcast tv rights during the 1960's<sup>3</sup>, football clubs today became professionally managed and organized corporations, ensuring their stability. For these reasons each club became a serious business, which promotes its image or values by implicating music over several decades. Music anthems are very popular for club's communication, but there is a lack of informations referring to the use of sound and music in football corporations. Especially when considering sound branding elements like jingles, brand songs, soundscape and sound logos.

Sound branding and its elements can possibly effect on better marketing opportunities or opening up new markets, as well lead to a stronger fan commitment. To gain the subject of sound branding and its elements, this research study introduces further disciplines which provide appropriate solutions when conveying brand identity values to sound.

A coherent feature of the sound design criteria is the utilization of soundscape or soundmark, respectively. This discipline describes the sound of a landscape which provides a distinctive character of each territory. The implication of soundmarks can therefore supply an appropriate transfer from brand values to sound.

Further, a guideline of sound branding process does not exist yet. Hence, this research aims to find connections between the conveyance of brand identity to sound and to design a sound logo that represents the identity and values of the FC Porto brand in a distinctive manner.

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<sup>1</sup> Audio Branding Academy, 2012.

<sup>2</sup> Steiner 2009, p. 34.

<sup>3</sup> Browning, 2010.

## **1.1 Project**

This chapter describes personal expectations, problems in research of sound branding design, and some aspects of sound trademark, where sound is used to conduct the brand function.

## **1.2 Motivation**

There is a lack of utilization of sound branding elements to football corporations, and an academic and practical documentation of them as well. The motivation of this research project is to design a sound logo as a basis for a sound identity for the football club FC Porto. The decision to involve FC Porto in this case study, relies on its national and international success and the need of a sound identity. The literature review presented in this proposal and further study, respectively, may provide to find answers given in the hypothesis, and also to find connections between FC Porto's soundscape<sup>4</sup>, its unique soundmarks and the impact of the utilization of the sound logo.

## **1.3 Thesis and Hypothesis**

Thesis - It is possible to design an appropriate Sound Logo for FC Porto by the implication of soundmarks.

Hypothesis - Soundmarks of FC Porto's soundscape can support the development of the sound logo design.

## **1.4 Problems recognition and Troubleshooting**

Since conventional corporations utilize sound logos as a representation to its existing values<sup>5</sup>, they have created a brand which can be recognized and distinguished from competition. Professional football clubs started the communication with consumers in past

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<sup>4</sup> That is the sonic geography of FC Porto.

<sup>5</sup> Values describe corporate philosophy.

years to strengthen their brand. After Spehr (2009) the goal of a brand is to „[...]characterize the performance of one or more providers, and to distinguish them from competitive offerings.“<sup>6</sup> But the problems in the area of sound branding, and especially in sports, leads to some questions, that motivates the investigation in this research project:

- How can a sonic identity be defined for a football club?
- Which soundmarks could be appropriate for the best result?
- Which brand values are significant when conveying them by sound?
- And how does the sound logo of FC Porto fit into the corporate identity?

Further research of FC Porto's corporate identity should indicate which values could be communicated by the use of a sound logo. Indications show, that the visual logo very often does not match with the sound logo and vice versa.<sup>7</sup> As it will be outlined in chapter 3.6., the visual logo of Deutsche Telekom demonstrates impressively how visual-acoustic links can be established. But for all that, designing a musically flexible sound logo could carry out challenges. Roschmann et al. (2011) were analyzing the relatedness between corporate anthems and corporate identity of professional football clubs in Germany, among these also FC Bayern. The results showed a non-integration of corporate anthems into integrated marketing. In other words, corporate anthems did not match with corporate identity. Designing a sound logo beside an existing corporate anthem may be challenging and implicating further questions not only to integrated marketing, also to design criteria of sound logos.

## **1.5 Research Methodology**

This chapter presents the method and the methodology of research including data collection, analysis techniques and potential data collection tools.

To design a most appropriate sound logo for FC Porto, this research is adopting suggestions and methodology provided not only by the case studies of Deutsche Telekom and BMW, as well from other practical examples given in chapter 3.5.1. Since very little is

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<sup>6</sup> Spehr 2009.

<sup>7</sup> Killian, Bronner/Hirt (eds.) 2007, 59.

known about a conceptual design and utilization of sound branding elements, as well in sports, the mentioned case studies might support the conceptual sound logo design, as well to experience how sport events and organizations can sonically be identified.

For this case study a mix of quantitative-qualitative research model is utilized. Quantitative research allows to find connections between variables, to make descriptions using statistic treatment of collected data, and test the thesis, in other words to test the hypothesis. Since the research is going to conduct recordings of the stadium which were made during the observation in Estadio do Dragao, qualitative research allows more reliable approaches in addition to quantitative research. Because, the inductive manner of the qualitative research allows to develop concepts and understand phenomena from recorded data.

As a data collection technique enquiry by interview is very useful. Before and during the sound logo prototype design, suggestions of professionals of FC Porto were considered. Taken informations and suggestions were taken into account, which then possibly can serve the research to design an appropriate sound logo.

Beside theoretical collection aspects, most collected data will be made through field recordings. More precisely, recordings of the soundscape and its soundmarks. Then, recordings are going to be selected and analyzed in a sound studio. Appropriate audio equipment is necessary to successfully accomplish the designing part of the research.

## **Part Two - Literature Review**

## **2. Theoretical Foundations of Football Business and Brand Management**

There are ca. 25 millions of brands registered worldwide.<sup>8</sup> This amount suspects the power of brands, and the way they affect our cognition and behaviour. Considering a football club as corporation, sports and music have a long tradition, only to mention ancient Greeks, who have been the first culture which incorporated competition into civil life, and encouraged musical as well as athletic competition to festivals held.<sup>9</sup>

Marketing of sports, or better to say marketing of football has gained its importance as corporate football has passed through remarkable changes in business and marketing in the last twenty years. In following chapters football marketing and its structures are documented to emphasize the complexity and characterization of football entertainment, business and communication. As well further subchapters describe briefly the term 'brand' and 'branding', and associations referring to them and those which are relevant for brand identity too.

### **2.1 Football Business**

Beside the game itself football became a serious business. When looking up to some football clubs like FC Porto, one can ask the question: Is it a club or a corporation? According to Ballensiefen & Nieland (2008) football progressively became a media event<sup>10</sup> over the 1960's, due to the fact that football clubs raised up not only to national wide, as well as to international wide global enterprises. This fact is supported by Roschmann et al. (2011) which go further and maintain that the growth of football clubs as well as its representation through a conceptual design and integration of sound logos can asset a club when reaching new markets, e.g. in Asia, USA and South America.<sup>11</sup> These facts highlight the importance of football club's representation inwards and outwards. Hence, football clubs have their images or values which are not only important for the process of

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<sup>8</sup> Steiner 2009, p.8

<sup>9</sup> McLeod 2011, p.13-14

<sup>10</sup> Ballensiefen & Nieland, 2008.

<sup>11</sup> Roschmann, Ehnold & Mutter, 2011.



business growth. And referring to Schäfer & Roose (2008) which determine football from the sociologic point of view, a football image is also relevant for the fan commitment, their identification, interaction and collective-well-being.<sup>12</sup> Even if the dual role of fans, as consumer and image carrier seems to be special when considering conventional corporations with its customers, the media staging or production of football increases qualitatively and quantitatively, what brings with it, that the producer<sup>13</sup> and receiver<sup>14</sup> expect availability and professionalism.<sup>15</sup>

Sports marketing aims to promote sport organizations and sport-related products.<sup>16</sup> It can be distinguished between marketing with sports or marketing of sports. Latter is the discipline which supports the process of sound branding, and therefore, it is more significant to understand integrated marketing.

The literature declares football as a service, whereby the football game is the central point, e.g. a game in the stadium. But there is not only the game when trying to classify the brand of a football club. Merchandising belongs meanwhile as a further branch of trade of football clubs. Museums, fan shops and even restaurants provide consumer goods which are related to its brand, to strengthen brand equity and brand loyalty. So, it is reasonable to question how service and products can differ from each other or simply be merged, when considering corporate communication. Kapferer (1992) gets to the point as follows:

„The product is what company makes, the brand is what customer buys.“<sup>17</sup>

Even if last decades were of remarkable changes in football as a business, clear separation between service (game) or sale of merchandising articles can not clearly be made. Therefore, these facts make a comparison to conventional corporation more difficult when analyzing the relationship between producer and consumers. Otherwise current football business has transforming the sport into a worldwide industry, where clubs like FC

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<sup>12</sup> Schäfer & Roose, 2008, p. 207.

<sup>13</sup> Producer is the football club with its management and players.

<sup>14</sup> Receiver are fans, consumer, customer or sponsoring partners.

<sup>15</sup> Ballensiefen et al., 2008.

<sup>16</sup> Derndorfer 2006, p. 23.

<sup>17</sup> Kapferer 1992, p. 10. (The german original is translated by myself - „Das Produkt ist das, was das Unternehmen herstellt, die Marke das, was der Kunde kauft.“)

Bayern, Real Madrid, Manchester United or FC Barcelona became global enterprises, in turn who transformed themselves into famous brands. One of the big changes began with the presence of European football clubs in Asia and America. The clubs were focused on this emerging markets. As a consequence, tv broadcast rights, prize money from competitions (e.g. UEFA Champions League), sponsoring, advertising, ticketing and merchandising became the main sources of revenues for most football clubs worldwide. Consequently a football brand needed to be developed, extended and managed, but not only to sustain new challenges, also to ensure profit maximization and interaction with consumers through constant brand experience.

## **2.2 Football Marketplace**

Football market points out some characteristics which are not always given in the economy. Whereas in this research comparisons to other conventional corporations are made, two essential differences are outlined.

### **2.2.1 Structures**

To produce their goods, football clubs are organized in national and international associations, where they align various game competitions. As well they submit to certain rules, such as the temporal organization. In this case, each club tries to maximize its own economic and sporting success. Incorporation of clubs take place with the goal of creating uniform structures for the competition. Derndorfer (2006) who analyzed the brand identity of FC Bayern München claims that such competitions are even more than just a marketplace. Therefore football clubs are subjected to brand limits, such as economic and sporting barriers.<sup>18</sup>

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<sup>18</sup> Derndorfer 2006, p. 24.

### **2.2.2 Brand Limits**

Not only in portuguese football competitions such as Primeira Liga and Segunda Liga, also in any other european football league which is a member of UEFA, brand limits of a football club can be divided in economic and sporting barriers.

The admission to Primeira Liga depends on the sporting success of each club, as long as its economic situation allows participation. Latter is the area of licensing of each national football association. Due to the relegation to upper (highest) and lower leagues, constant group of participants remain, and sporting success and sporting failure lead solely to consequences at the end of each season. The lower the league of a football club participant, the higher are its limits of admission to the upper league. Furthermore, according to mentioned national and international associations a predefined numerical restriction of football clubs comes up.

The economic limits can be divided into market access restrictions, before and after the sporting qualification. Firstly, investments need to be made to ensure sporting success, such as infrastructure and staff, and secondly, football clubs need to pass the licensing procedure of each football associations. Therefore, they have to give account not only to the football associations, also to their investors.

## **2.3 General Objectives of Football Clubs**

It can be assumed that objectives of professional football clubs are both economic (quantitative) and non economic. Latter strives for a sporting goal. Due to commercialization of football, the growing interests of spectators and public led to economic ,pressure to succeed.<sup>19</sup> Questioning which objectives has top priority set, can not clearly be answered yet. For Brandmaier & Schimany (1998) revenue maximization is the main goal,<sup>20</sup> which on the other hand ensures sporting success. Frank (2009) who analyzed football clubs for the ‘identity orientated branding‘ designates football clubs as corporations, and claims that the main objectives are ensuring livelihood and long-term

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<sup>19</sup> Frank 2009, p. 11.

<sup>20</sup> Brandmaier & Schimany 1998, p. 63

profit maximization. Thus, most European football clubs became corporate enterprises, and Derndorfer (2006) is of opinion that profit maximization is of increasing interest.<sup>21</sup>

After Desbordes (2007) the balance between sporting and economical results is difficult to achieve because of the significant pressure of media, and also of political and social groups.<sup>22</sup> When managing and communicating a football club, developing a strong brand should be a goal, because a brand affects economical and sporting results and vice versa. Frank (2009) considers that this correlation makes clear how important targeted branding for football clubs is nowadays.<sup>23</sup>

## 2.4 Brand Vs. Branding

Brand can be a name given to a product, a service or a company. It is a set of perception and images that represents those. American Marketing Association defines brand as "a name, term, sign, symbol, or design, or a combination of them intended to identify the goods or services of one seller or a group of sellers and to differentiate them from those of competition."<sup>24</sup>

A brand is basically much larger than just a visual and sonic logo, it is a core of what will be presented or experienced.<sup>25</sup> Commonly a brand enables one to recognize a particular association, and it is developed thru advertisements, recommendations, interactions and real-time experience. In other words, „once developed, brands provide an umbrella under which many different products can be offered--providing a company tremendous economic leverage and strategic advantage in generating awareness of their offerings in the marketplace.“<sup>26</sup>

On the other hand, after the Oxforddictionary (2014) the term branding was originally an expression for identifying mark burned on livestock,<sup>27</sup> it enabled the classification of animals easier. Today branding describes the process of brand

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<sup>21</sup> Derndorfer 2006, p. 25.

<sup>22</sup> Desbordes 2007, p. 12.

<sup>23</sup> Frank, 2009, p. 11.

<sup>24</sup> American Marketing Association (AMA), brand definition 2014.

<sup>25</sup> Persuasive brands, brand definition 2014.

<sup>26</sup> Persuasive brands, brand definition 2014.

<sup>27</sup> Oxforddictionaries, 2014a.

development and brand management within the framework of brand communication. It represents the values thru an explicit logo, fonts, color schemes, symbols and sound which may be developed to represent implicit values, ideas, and even personality.<sup>28</sup> Due to industrialization mass manufacturing and mass distribution carried out new experiences between product and demand, therefore, a new relationship among supply and demand was formed. Following Straka's (2007) analysis referring to the functions of corporate sound, this resulted a development of the first brand communication strategy that ultimately led to the concept of brand as a tool of information brokering.<sup>29</sup> When looking at advertisement, Landa (2005) point out that in 1800's many people did not read newspaper, so distributors find new ways reaching the customers, through placards, banner and even umbrellas sporting signs.<sup>30</sup>

„The mass manufacturing and marketing of the Industrial Revolution spurred the growth of visual identification and trademarks. It also pointed out the importance and value of visual identification systems and trademarks.“<sup>31</sup>

In the beginning of the twentieth century the industrial growth was great, and people with enough income could afford to spend more money on branded goods. The rise of mass media conduced the rise of brands, and the desire for branded goods. Following print advertising, later radio advertisements and sponsorships transmitted and enhanced brands values thru music and sounds.

### **2.4.1 Brand Identity**

It typically starts with a key word, or a sequence of words, consequently, this so called brand idea then consists some brand values of a corporation set. Given values can be illustrated on the example of the UEFA Champions League below:

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<sup>28</sup> American Marketing Association (AMA), branding definition 2014.

<sup>29</sup> Straka, 2007, p. 5.

<sup>30</sup> Landa 2005, p. xxii.

<sup>31</sup> Landa 2005, p. xxii.

## ‘Prestige‘ and ‘Heritage‘



*Figure 1: UEFA Champions League Visual Logo and Slogan*

The illustration above shows how given objectives lead to a successful definition of ones brand identity, because „[...] the brand identity includes those features of the brand that shape the character of the brand from the perspective of internal audiences in a sustainable manner“<sup>32</sup>. Messing & Killian (2004) characterize that brand identity is within the framework of brand management, and one of the prior purposes of brand management is to create and develop a brand identity, that signifies what a brand stands for,<sup>33</sup> and to set the brand apart from the competitors. This is one of the main requirements for a strong brand identity: differentiation. Referring to the analogy of human being, Aaker (1996) defines brand identity in the following way:

„Brand Identity is a unique set of brand associations that the brand strategist aspires to create or maintain. These associations represents what the brand stands for and imply a promise to customers from the organization members.“<sup>34</sup>

Aaker (1996) also highlights four perspectives to give brand identity a profile. Therefore, a brand can be considered as product, corporation, person or a symbol.<sup>35</sup> But it is not easy

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<sup>32</sup> Gabler Wirtschaftlexikon 2014. (The german quotation is translated by myself - „Die Markenidentität umfasst diejenigen Merkmale der Marke, die aus Sicht der internen Zielgruppen in nachhaltiger Weise den Charakter der Marke prägen.“)

<sup>33</sup> Messing, Killian 2004, p. 5.

<sup>34</sup> Aaker 1996, p. 68.

<sup>35</sup> Aaker 1996, p. 78.

to transmit all those elements. In this case Derndorfer (2006) suggests to focus on one category, the one that remains constant over time.<sup>36</sup> Whereas Killian (2008) is of the opinion that a strong linkage of a clear brand identity to the business strategy is key to reach the level of brand sophistication.<sup>37</sup> Adjouri (2002) describes brand identity as a key source of brand management. And depending on the objective set, steps of brand identity can be taken to plan and implement brand strategy, brand positioning, brand image, brand value and brand-boat community.<sup>38</sup> Taken together, the brand identity is basically the total of all important values that are associated with the brand.

Referring to the development of brand identity for football clubs, Derndorfer (2006) demands three identity features for strategic branding: regional stay, long-term sporting success and general partnership. At the level of regional stay, social, ecologic, cultural and historical transfers of image occurs, which are even strengthened by the naming. A long-term sporting success can provoke a stronger identification, even national wide. Strategic partnerships play an important role when developing its identity. Economically well situated clubs as FC Porto for instance, do have sponsors, but not integrated them to its naming. Derndorfer (2006) claims that such cooperations need to be planned carefully to avoid an Image-Overflow.<sup>39</sup> In terms of communicating the brand identity Killian (2008) gets to the point and argues:

„[...] a strong brand identity should provide sustainability with respect to the different experiential touch points and over time. The brand message should be the same no matter where and when a customer interacts with the brand. It should also be maintained over time. Slight adjustments are okay as long as self-similarity is maintained. In this case, the brand identity, also referred to as brand DNA or genetic code, stays intact and with it the value of the brand.“<sup>40</sup>

Once brand identity is defined, brand elements need to be selected in order to help communicate brand identity. And one of the primary brand elements tools is sound branding which will be outlined in chapter 3.

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<sup>36</sup> Derndorfer 2006, p. 37.

<sup>37</sup> Killian, Bronner/Hirt (eds.) 2008, p. 35.

<sup>38</sup> Adjouri 2002, p. 89.

<sup>39</sup> Derndorfer 2006, p. 38

<sup>40</sup> Killian, Bronner/Hirt (eds.) 2008, p. 36.

## 2.4.2 Brand Equity

A brand is of paramount importance for a corporation and its target group. Once a brand is defined, it creates an imagination in one's head. It can influence even consumers' behaviour when choosing a product, service or an identity. In case of latter, a brand and its equity can lead or mislead to stronger or poorer commitment to a football club, or its values respectively.

But how do corporations benefit from their brands? Apparent from a research study of Roth (2005) the profit occurs when brands create a brand equity for their products<sup>41</sup> or their values. As a result, advantages (e.g. finances) emerge in comparison to competitors. In the empirical study referring to brand equity of sport club brands, Ströbel (2012) reports that growth and strength of brand equity of sport corporations depends from interest and familiarity of fans, as well from perceptions, expectations and valuations of sponsors and media corporations.<sup>42</sup>

Brands come alive with all human senses - sight, hearing, taste, smell and touch. The perception of all those informations combines different inputs of sensory system in human brain - stimulus modalities occur. Following subchapter includes a brief description and importance of the so-called Multi-Sensory Branding.

## 2.4.3 Multi-Sensory Branding

After Keppler & Mazanec (2014) the brain works extremely multi-sensorial, and all perceived and processed sensorial information are merged into each other, and affect each other without any notice on our part.<sup>43</sup> Ericsson & Larsson (2011) affirm that this so-called fragmentation is important for the creation of experience in the post-modernistic society.<sup>44</sup> Football business changed constantly over many years and became nowadays a media event which offers more than just the game. Sheth & Parvatiyar support deliberating, that consumers nowadays do not want to be entertained in a usual or normal

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<sup>41</sup> Roth 2005, p. 1.

<sup>42</sup> Ströbel 2012, p. 3.

<sup>43</sup> Keppler & Mazanec 2014. URL

<sup>44</sup> Ericsson & Larsson, 2011, p. 30.



way.<sup>45</sup> Consumers are interested in products, services and brands that appeal to their individual style and identity.<sup>46</sup> It is because human senses play a crucial role for the experience and emotional connection. Moreover, Lindstrom (2005) refers to multi-sensory branding and describe its power as 'the power of neglected senses'. In the world of auditory perception, signal sounds - just to mention mobile ring-tones - also run the risk to become environmental sound pollution. Differentiation therefore plays a decisive role, and sound has clear touch points where it can be used.<sup>47</sup>

It can be assumed that the future of Sound Branding and its elements goes with sight, smell, taste and touch. Considering the statement of Groves (2007) one has to wait and see „as it is apparent that we are not yet able to optimally use the dual-sensory communication possibilities we have had for years“<sup>48</sup>. Thus, differentiation from competitors, as well as long-term values are a powerful and a very important feature of brand communication.

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<sup>45</sup> Sheth, J. & Parvatiyar, A. 1995.

<sup>46</sup> Ericsson, Larsson, 2011, p. 30.

<sup>47</sup> Groves, 2007, p. 43.

<sup>48</sup> Groves, 2007, p. 48.

### **3. Foundations and Definitions of Sound Branding within the process of Sound Branding**

After the brief description of football business and brand management, in this section foundations of sound branding are going to be widely presented and discussed. Defining the terminology of sound, logo and ultimately sound branding. An unique guideline for an appropriate process of sound branding design does not exist, therefore in chapter 3.6.1 some example of diverse sound logos are presented and shortly analyzed.

In the time of quality assurance, information overflow and brand varieties arise, where more and more associations or corporations communicate their images and values thru sound. Sound can create differentiation and recognition, thus a consistent communication strategy is required to transmit functional and emotional brand attributes to acoustic messages, that emphasizes one's sound identity and strengthen its brand. The sound identity that is described by musical parameters like tempo, rhythm, instrumentation, melody etc. or sound samples build a basis for acoustic performance and the design of sound branding.<sup>49</sup>

It is remarkable how many associations or corporations use sound logos for communication, on the other hand, it is also surprising how many do not utilize sound logos. For instance, the American multinational corporation of consumer electronic Apple Inc. is not communicating its values through a sound logo, although it is communicating with consumers by sound objects. After Steiner (2009) sound objects are the shortest and most concise elements of sound branding, whereby they can be a part of a sound logo or a brand song<sup>50</sup>. They usually serve as acoustic 'supporter' for applications and functions to ensure the ease of use. This research study will not cover the design and use of sound objects, for detailed informations further literature should be consulted.

Football is overwhelmingly known in generating and transmitting emotions, and football anthems seem to be highly relevant for the communication between organizer and spectators, as well for a strong fan commitment. Following chapters will briefly outline aspects and attributes of sound logos, its importance, application and values in the field of brand communication, which on the other hand can server a football due to the conceptual communication.

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<sup>49</sup> Steiner 2009, p. 33.

<sup>50</sup> Anzenbacher, 2012, p. 110.

### 3.1 Definition of Sound and Logo

There are some synonyms referring to sound such as audio, sonic and acoustic. But for all that researches and experts often use the term sound to describe processes between listener, environment and sound. In this research the term sound is used following the definition by Groves (2008):

„The term ‘Audio’ refers to audibility and has more of an electronic feel, especially when sound is recorded, transmitted or electronically reproduced. ‘Sonic’ has more of a sound-wave/frequencies character while ‘Acoustic’, while also being receptive (based on hearing), has more to do with the physical properties of sound in air and space.“<sup>51</sup>

For Groves (2008), the term sound is the main term for everything hearable, which can be music, sound effects, background noise and even the human voice.

In connection with corporate identity, terms as sound identity, corporate sound, corporate audio and acoustic identity were developed, whereby corporate sound refers to corporates representation rather than to its single brands or segments. For instance, the latter includes football, handball or volleyball of FC Porto. The top seller of FC Porto is football, therefore, a sound logo can be utilized even to previous mentioned sport categories. This method is supported by the Soundscape theory, where the relationship between human and the environment sounds is constantly changing. As a consequence, a sound of a landscape or a space becomes a crucial component of one’s territory. Detailed description of soundscape and one of its element the so-called soundmark are outlined in chapter 3.4.

In contrast to sound, the Oxforddictionaries (2014) defines a logo as an abbreviation of a logotype that consists of the greek word ‘logo’ which means ‘word’ and ‘typos’ which means imprint. It is a graphical symbol or a name which mostly represents individuals, corporations and organizations.<sup>52</sup> Nowadays logos are utilized to the greatest possible extend. But yet, a logo is often a synonymous for a trademark or brand.<sup>53</sup> Logos

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<sup>51</sup> Groves 2008, p. 2.

<sup>52</sup> Oxforddictionarries, 2014.

<sup>53</sup> Wheeler, 2006, p. 4.

have a long tradition, however, according to Meggs (1998) the rise of the logo came up with the industrial revolution of the western countries where its development took place in photography and lithography and which then contributed to the boom of advertising industry that on the other hand integrated typography and imagery.<sup>54</sup> In sports logos are important to emphasize not only club's history also to be recognized by consumers.

### 3.1.1 Sound Logo

During the 1970's the term 'Kennmotiv' was very common in the sound branding society in Germany, which then was later replaced by 'Kennmelodie', also known as signature tone. Latter is a term which is derived from Wagner's leitmotiv. After Eggebrecht (1996) a leitmotiv can be a theme of a easily recognizable melodic, rhythmic or harmonic character or identity, which returns time and again always with a reminiscence of the original association.<sup>55</sup> In the case of sound logos, the so-called sonic mnemonics are consisting of a short sequence of notes, which are mostly between one and three seconds long.<sup>56</sup> They can be represented by tones, by one or more variety of sounds or noise, or a combination of both. Anzenbacher (2012) analyzed sound logos from psychoacoustic point of view and reports that the categorization of a sound logo 'Gestalt' brings up also some difficulties when considering Mazda's claims 'Zoom, Zoom'.<sup>57</sup> The whispering voice which presents two words could also be a sound logo, slogan or even a brand voice. But the conciseness and the specific timbre of this acoustic signature, justify the term sound logo. A clear definition of sound logo is provided by Groves (2007):

„A Sound Logo is a Sonic Mnemonic – an audible mnemonic device that can make associations and links. Some examples are police sirens, the ringing of a telephone, the cry of a baby. We know that sound and music can also communicate emotions and create geographic as well as time-related links.<sup>58</sup>

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<sup>54</sup> Meggs, 1998, pp. 138-159.

<sup>55</sup> Eggebrecht, 1996, p. 8.

<sup>56</sup> Steiner 2009, p. 40.

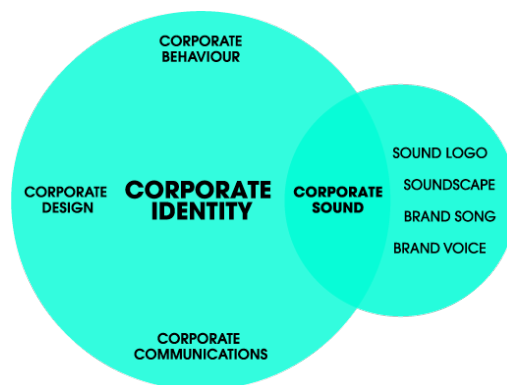
<sup>57</sup> Anzenbacher 2012, p. 98.

<sup>58</sup> Groves, 2007, p. 51.

After the definition above, in this research study the term sound logo is used. Further, it can be assumed, that it is the most popular element of corporate sound and „in most cases sound logos currently provide the basis for a Sound ID“, <sup>59</sup> that ideally builds a symbiosis to the visual logo, as it will be presented on the example of Deutsche Telekom in chapter 3.7.

## 3.2 Sound Branding

Sound Branding is a strategic process of brand development by the use of sound elements - referring to defined values. It is not an isolated marketing tool, it must be integrated within the framework of brand management, and it is an crucial instrument of corporate identity, known as corporate sound.<sup>60</sup> Latter is a part of corporate identity and the result of sound branding. The transfer of brand identity to sound can be described in a following way: Image and values > Corporate Sound > Music and Sound Logo > Application. Figure 2 illustrates the consolidation of corporate identity and its elements.



*Figure 2: Corporate Identity and its elements*

It results a specific and esthetic expression of differentiation in marketplace and a strong consumer commitment, as far as the acoustic performance is unanimous with the concept of corporate identity. Steiner (2009) reports, only the utilization of a sound logo will not clearly produce a strong sound image without involving the entire acoustic environment of a brand.

<sup>59</sup> Groves, 2007, p. 51.

<sup>60</sup> Steiner 2009, p. 27.

There are many components of sound branding which can be used for brand communication. Depending on the communicational context, every element has a certain effect relating to brands or products respectively.<sup>61</sup> In comparison to visual branding still there is no a unitary terminology for sound branding, or a set of general approved sound branding elements. Whatever the circumstances are, all elements have one thing in common - getting a close affiliation with the brand.

### **3.2.1 Soundscape**

Soundscapes are included to music composition, sound art and sound design. Latter covers the field of sound branding, and therefore it is very common to involve soundscape and its theory to practical approach of sound design.

A crucial feature of this research study is the implication of soundscape elements to the sound logo design or sound branding, respectively. Soundscape is a made-up word of sound and landscape. The soundscape theory is characterized by the Canadian composer Murray R. Schafer, who defined soundscape as sound or a combination of sounds that forms or arises from an environment. The soundscape of an environment or space is made up of natural sounds, speech, machine sounds and music. To distinguish and therefore better classify different sounds, Schafer (1993) states three elements of the soundscape: Keynote Sounds, Sound Signals and Soundmark. Soundmark is an soundscape feature that is implicated to the sound logo design in this research, which in turn is going to be covered. After Schafer (1993), “the term soundmark is derived from landmark and refers to a community sound which is unique or posses qualities which make it specially regarded or noticed by the people in that community”<sup>62</sup> Further, Schafer (1993) claims that once a soundmark is identified, it should be protected, because they make the acoustic life of a community unique. In this particular case, the soundmarks of Estadio do Dragao are consisting of the specific crowd, chanting and cheering sound, which form a unique sound territory of FC Porto. Soundmarks, keynote sounds and signal sounds have a significant sound source, whereas they can be distinguished between Geophony (earth, non biological natural sources), Biophony (non human and non

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<sup>61</sup> Steiner, 2009, p. 39.

<sup>62</sup> Schafer, 1993. p. 18.

domestic biological sources) and Anthropophony. Latter is a source where sounds are generated by humans, including crowd and cheering sounds.

In the theory of soundscape Schafer (1993) with the engagement of Truax (1984), introduced two concept created by the environment, a hi-fi and a lo-fi soundscape. In a hi-fi soundscape, sounds can clearly be perceived, as well as their source and its distance within the acoustic space. In turn, a lo-fi soundscape has a diffuse sonic space. Individual sounds can get lost, whereas overlapping and masking occurs (for example by constant traffic noise). In a football stadium the soundscape mostly enables a lo-fi environment. Though, a clear connection what is more appropriate for the listener can therefore not be clearly made.

Soundscapes and its elements are crucial when signifying an environment. In research soundscape is a discipline of acoustic ecology, whereas experts try to reduce noise pollution by getting the noise under control, and to make the environment more pleasant for the ears. Thus, it can be assumed that our lives without soundscapes would lack the contextual references that help contribute to the quality of our lives.

### **3.3 Application and Values**

The application of sound branding benefits from the increasing digitalization and the growing popularity of audible contents.<sup>63</sup> There are many media platforms for integrated sound communication, e.g. tv, cinema, radio, phone and internet. Still the main goal is to reach the masses by mass media by communicating with sound. In other words, to get thru to the target group.<sup>64</sup> Steiner (2009) reports, that specific brand touch points are not relevant equally for any brand.<sup>65</sup> By doing this, mentioned areas of application for sound branding depend in which context a brand wants to be promoted.<sup>66</sup> Utility of sound branding elements takes place internally and externally. Latter generates attribute of differentiation, while internal utility brings into being identified, e.g. employees with their corporation. Nevertheless, sound logos are mainly used for the external communication.<sup>67</sup>

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<sup>63</sup> Steiner, 2009, p. 49.

<sup>64</sup> Anzenbacher, 2012, p. 102.

<sup>65</sup> Steiner, 2009, p. 50.

<sup>66</sup> Steiner, 2009, p. 50.

<sup>67</sup> Anzenbacher, 2012, p. 102.

Following football events, there is a lack of informations referring to sound branding. But there are still corporate anthems of football clubs and other associations like UEFA, that show how music is applied to emphasize their brand. Time after time on Tuesday and Wednesday at 8.45 pm Central European time, the same piece of music can be heard across Europe. A classical piece resounds at stadiums and television screens. Georg Friedrich Händel's 'Zadok the Priest' (coronation anthems) is the theme of the UEFA Champions League, that „[...] epitomizes the aim to associate the competition with very specific implications“<sup>68</sup>. This piece of music is very known, and still it associates the UEFA Champions League as a competition, rather than the corporation, the logo or the name of UEFA.<sup>69</sup> This indicates that the UEFA Champions League theme communicate its brand touch points mainly at television and events (stadium) by the use of music.

Furthermore, communicating with sound can generate an added value. Those can be differentiation from competitors and increase of brand recognition, that on the other hand provide competitive advantages.<sup>70</sup> According to Steiner's (2009) opinion, the gain of internal and external identification through a constant sound branding campaign can increase the brand equity too.<sup>71</sup>

### **3.4 Impact of Sound Logos on Consumer**

Sound logos are increasingly becoming a 'vehicle' for conveying a memorable message to target groups (consumers) Though, we are taking advantage of the powerful memory sense (or ability) of sound. Hence, sound logos operate as audio cues, which lead then to a learning effect of recipients or consumers, respectively. A perceived single sound can also increases the recall<sup>72</sup> and even strengthen the ability of memory. As mentioned before, latter is the ability of memorizing and retrieving captured informations (acoustic stimuli) stored in the human memory. Then information processing occurs where the sensory input is processed. Therefore, auditive informations are not only transformed, recovered, elaborated and recovered, as well they are stored and retrieved (recalled).

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<sup>68</sup> Chadwick & Holt 2007, p. 38.

<sup>69</sup> Chadwick & Holt 2007, p. 39.

<sup>70</sup> Steiner, 2009, p. 53.

<sup>71</sup> Steiner, 2009, p. 53.

<sup>72</sup> Recall is the retrieval of events or informations from the past.



Each time when known sounds are perceived, associations are linked and emotions triggered. Referring to sound logos within the non-verbal acoustic communication in brand communication, Roth (2005) uses the term 'memory cues'<sup>73</sup>. A simplified explanation referring to the information processing of the human brain, takes place progressively, and after most models the pathway is gradually divided in sensory memory, working memory and long-term memory.<sup>74</sup> Indeed, cognition processes or the pathway of storing and recalling informations, respectively, are more complex as described. Whatever the case may be, there is evidence to the powerful ability of memory when considering acoustic stimuli. For instance, Anzebacher (2012) and Steiner (2009) point to investigations of the Radio Advertising Bureau (RAB) in London and the University of Leicester referring to the effect of radio spots. The results lead one to come to a conclusion, that the ability of memorizing and recalling sound was increased, based on appropriate music or sounds, rather than without music or sounds. But one has to be careful with such conclusions. Because, depending on the mode of listening, a conscious or unconscious perception of sounds and music can affect the memory, and the learning effect of consumers.

Due to increasing complexity of cognition and perception, this chapter will not cover further aspects. Psychology of music and research in memory are a very huge and complex subject of the field of neuroscience. Mentioned coherences should solely provide a solid basis to comprehend the impact of perceived acoustic stimuli. At that point further literature should be consulted. A detailed and extensive explanation about the memory and information processing is provided by Baddeley, Eysenck & Anderson (2009).

### **3.5 Design Criteria**

After the definition of terminology and the summary of sound logo and sound branding foundations, this section offers criteria which might asset the sound logo design. Since there is no a unique guideline for a sound branding development, most essential criteria are outlined which are significant for this research and the sound logo design.

First of all, it is not clear how the relationship between sound to color is defined. As well in literature there are no clear results which can describe this synesthesia. This fact is supported by Groves (2007) who claims that „the relationship of sound to color, although

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<sup>73</sup> Roth, 2005, p. 102.

<sup>74</sup> Anzenbacher, 2012, p. 60.

perhaps is not so widely known [...] <sup>75</sup>. Due to this fact synesthetic phenomena will not be implied to the sound logo design.

Beside synesthesia sometimes even a visual logo can build a basis for the design of a sound logo. In this particular case one might include theoretical principles and laws of Gestalt psychology. The word Gestalt is a German word for 'shape' or 'form' which implies the German word for creativity, 'Gestaltung'. The Gestalt theory was developed 1920's in Germany, the so-called Berlin School, as a reaction to the Behaviorism and Structuralism. Wikipedia (2014) defines Gestalt theory as „[...] a theory of mind and brain that proposes that the operational principle of the brain is holistic, parallel, and analog, with self-organizing tendencies.” The Gestalt effect is defined as the form-forming capability of our senses, particularly with respect to the visual recognition of figures and whole forms instead of a collection of simple lines and curves. For Burmann (2007) Gestalt psychology has even an effect of multi-sensory experience, where a total impression at the recipient (consumer) can occur.<sup>76</sup> In the case of the sound logo design, principles of Gestalt psychology can be implicated if the transmission of brand identity is ensured. The application of Gestalt principles into the design of FC Porto's sound logo is not going to be involved, due to the complexity not only of the visual logo, but also of the conveyance of club's brand identity. For more detailed reference, Köhler (1970) offers extensive description of theoretical principles and laws of Gestalt psychology.

More established criteria of sound logo design is provided by the GROVES Sound Branding agency. Groves (2007) itself claims that following criteria may serve a proper conceptualization of sound logo design, where he distinguishes between memorability, flexibility, distinctiveness, conciseness and fit. Hence, those criteria are briefly described.

**Memorability** is probably the most important feature,<sup>77</sup> but it is also highly subjective, because this parameter is difficult to quantify. By definition, memorability is the ability of being able to recognize and recall. This is very important when building associations. To achieve memorability is to compose, design or create catchy sound or music. As catchy elements evoke and gain associations faster, communication becomes more efficient, because memorable sound or music requires less repetitions for building associations. Further, two forms of **flexibility** can be distinguished: musical and technical

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<sup>75</sup> Groves, 2007, p. 49.

<sup>76</sup> Burmann, 2007, p. 8.

<sup>77</sup> Steiner 2009, p.41.

flexibility. Musical flexibility is essential if a theme needs to be fit to different styles or musical contexts, or emotional and contextual situations.

Technical flexibility refers to the spectrum of frequencies. Not all sounds will work in certain applications. A sound logo must be designed to be recognized on any loudspeaker. That can be on television, radio, stadium or even on the phone. Ideally, the impact of a sound logo should work identically well at all touch points and applications.<sup>78</sup> Referring to musical and technical flexibility, it can be resumed that if its clear in which context (different music styles and instrumentations, media platforms) a sound logo is going to be applied, „[...] paying close attention to musical and technical flexibility is a must“<sup>79</sup>, so Groves.

Appropriate sound logos differ from other sound logos thru unmistakeable sound.<sup>80</sup> One should always be recognized and not getting confused with someone else. **Distinctiveness** is a further criteria which emphasizes the importance of knowledge of one's market sector, or even the whole market. Distinctiveness is a important parameter, thus a distinct sound characteristic need to be defined to differ from competitors. <sup>81</sup> On the other hand, distinctiveness may not be considered as a rational criterion, and sound logos can be defined as unique or distinctive, if a concrete example or a comparison is given.<sup>82</sup> It is mostly a few seconds long and contains simple sound combinations. <sup>83</sup> The **conciseness** of a sound logo is the result of its frequent application. And if the length would be longer than a few seconds, refusal by consumer could occur. <sup>84</sup> Thus, it can be assumed that conciseness is an advantage, because the possibility of refusal by consumer is reduced so, as well as the abrasion of the sound logo itself. As a consequence, application of sound logos is possible over a long time, and over different application areas or cross-platforms.

„A good Sound Logo has to be short and to the point.“ <sup>85</sup>

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<sup>78</sup> Groves, 2007, p. 49.

<sup>79</sup> Groves, 2007, p. 50.

<sup>80</sup> Steiner 2009, p.42.

<sup>81</sup> Steiner 2009, p.42.

<sup>82</sup> Anzenbacher 2012, p.101.

<sup>83</sup> Steiner 2009, p.42.

<sup>84</sup> Anzenbacher 2012, p.42.

<sup>85</sup> Groves, 2007, p. 50.

**Fit** expresses if a sound logo matches or conforms with brand values, or demonstrate its relevance to the brand. Groves (2007) provides an accurate definition as follows: „Ideally a sound logo, as a part of sound identity, will reflect the brand’s values and interpret its attributes into sound or music.“<sup>86</sup> Furthermore, Groves (2007) claims that, „if a good fit is not possible or, for whatever reason, not desired, it is very important not to contradict any of the brand’s values or its attributes.“<sup>87</sup> This can have an adverse effect, and the utilization of a sound logo is not reliable in this case.

### 3.5.1 Sound Logo Samples

This subchapter presents various sound logos referring to musical and technical flexibility, distinctiveness, conciseness and fit. As already mentioned in the previous chapter, memorability is a highly subjective ability, therefore, it is not going to be outlined in this section. Distinctiveness is difficult to quantify as well, but on the other hand it is an important criteria which can not only provide an appropriate and desirable result of a sound logo design, also it can set one’s representation through sound apart from the competitors and ensure uniqueness. The brief analysis of each sound logo below refers to analysis of Audio Logo Database (audio-logo-database.com).

• **Musical flexibility** - ‘Heute’ News have designed its sound logo in the 1960’s. The basis for the ‘composition’ is provided by the word ‘Heute,’ which is a German word for ‘today’. The technique for the creative process goes back to morse code, a method of transmitting text information through on and off tones or clicks.

Morse code ‘Heute’: ....//..-/-//

Verbal: Di-di-di-dit dit di-di-dah dah dit

Since the introduction of the sound logo, its basic character has never been change over 50 years. Its simple MIDI sound nature allows slightly adoptions which ensured the musical flexibility until nowadays.

Click to listen > Heute sound logo from 1988 Click to listen > Heute sound logo from 2009

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<sup>86</sup> Groves, 2007, p. 49.

<sup>87</sup> Groves, 2007, p. 49.

Industry: TV Broadcast

Number of sound events: 10

Sound category: Rhythmic

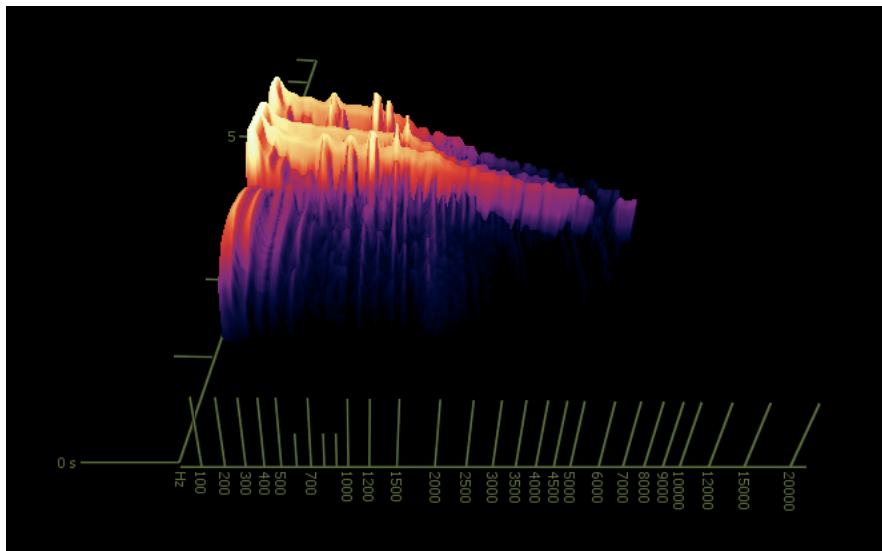
Instruments: Synthetic

General progression: Wavelike

Length: 3s

• **Technical flexibility** - Avira provides a smart solution of a technical flexible sound logo.

The rhythmical emphasizing 'Clicks' are characteristics of its sound identity which ensure technical flexibility. And the noisy sub bass provides a proper stereo image. Its overall spectrum extends from 100 Hz until 2 kHz, whereas the Clicks stand between 700 Hz and 1,5 kHz.



*Figure 3: Spectrogram Avira Sound Logo*

Click to listen > Avira sound logo

Industry: Software Development

Number of sound events: 5

Sound category: Rhythmic

Instruments: Synthetic

General progression: Wavelike

Length: 3s

- **Fit** - Lufthansa demonstrates ideally how brand identity aspects such as simple, uplifting and open are conveyed by sound. The composition has an ascending character that highlights uplift, for the purpose of flying and the feature of open. And finally the piano distinguishes a style of simplicity.

Click to listen > Lufthansa sound logo

Industry: Flag carrier, Airline

Number of sound events: 4

Sound category: Melodic and rhythmic

Instrumentation: Piano

General progression: Ascending

Length: 3s

- **Distinctiveness** - Intel's main target for the 3 seconds sound logo design reads as follows: „[...] tones that evoke innovation, trouble-shooting skills and the inside of a computer, while also sounding corporate and inviting.“<sup>88</sup> Intel's sound logo became so famous, that the company does not rely on its corporate name being seen, because its brand can be heard across media platforms since 1994. As the term Intel stands for intelligence, the distinctive character of its sound logo is provided by a collage of many single sounds. For instance, the first sound of the sound logo is consisting of 20 sounds. Intel enabled to make 'Intel inside' hearable, which in turn optimally convey its brand values and therefore fulfill the brand fit.

Click to listen > Intel sound logo

Industry: Semiconductor chip maker

Number of sound events: 5

Sound category: Melodic and rhythmic

Instrumentation: Synthetic

General progression: Wavelike

Length: 3s

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<sup>88</sup> Nucleus, 2009.

- **Conciseness** - Philips created a sound logo that is even communicating the brand values optimally (fit) due to its slogan 'Sense Simplicity'. At the same time its concise length of 1 second demonstrates once more simplicity, as well as the use of the triangle.

Click to listen > Philips sound logo

Industry: Software Development

Number of sound events:

Sound category: Percussive

Instrumentation: Triangle

General progression: Ascending

Length: 1s

Referring to the non function of given sound logos above, clear statements can not be made, due to the fact that a system of evaluation does not exist yet. In order that a sound logo works, the association between brand's identity and sound logo needs to be trained, to be memorable, recognized and ultimately recalled.<sup>89</sup> The easier it is recognized, the faster an association can be made, and the semantic memory triggered.<sup>90</sup> Well, nowadays many sound logos are present in media, therefore differentiation could exceed its limits and the process of sound logo design. Steiner (2009) points out, that the design variations of sound logos are not unfailing. As a consequence, it is going to be more and more difficult to create catchy sounds which can evoke attention and confidence.<sup>91</sup>

It is not clear if given examples above have a specific sound identity when considering given criteria. Groves (2008) takes the view that the use of a sound logo does not mean possessing a sound identity. By implication, having a sound identity does not always mean a sound logo is included.<sup>92</sup> Five criteria given above within examples of corporate sound logos show that certain criteria fit different needs and desires. If its clear form beginning on how and where a sound logo is going to be applied, some criteria might be redundant during the design or composition, respectively. But one has to keep in mind

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<sup>89</sup> Anzenbacher, 2012, p. 98.

<sup>90</sup> Steiner, 2009, p. 103.

<sup>91</sup> Steiner, 2009, p. 43.

<sup>92</sup> Groves, 2008b, p. 8.

that there is no a precise methodology for the creative process of sound logos within sound branding.

### **3.6 Jingle all the Way - Pathway to Sound Logo Design**

After the use of the most important disciplines which have to be taken into the consideration on the design of a conceptual sound identity, this chapter provides two case studies of major corporations from Germany which then function as a basis for the sound branding design on FC Porto's sound logo prototype. Further, these case studies outline the conveyance of brand identity and values to sound.

The first case study shows Deutsche Telekom (telecommunication), while the second case study represents BMW (automobile industry). Latter is providing an example where the established sound logo was replaced due to variability. Those two corporations are utilizing its corporate sound effective and for a long time, and their sound logos became trademarks which appear with regularity across media.

### **3.7 Deutsche Telekom**

Deutsche Telekom (DT) is one of six greatest telecommunication service companies of the world.<sup>93</sup> With a staff of some 230.000 employees,<sup>94</sup> around 143 million mobile customers, 31 million fixed-network lines, and more than 17 million broadband lines,<sup>95</sup> it is operating worldwide in more than 50 countries. The generated revenue of 2013 financial year amounts 60,1 billion Euro.<sup>96</sup>

After the reform of Deutsche Bundespost (German federal post office), whose Telekom was an integrated segment, in 1995 it became a quoted corporation named Deutsche Telekom. Telekom's core business is T-Com (fixed network), T-Mobile (mobile communication), T-Online (internet sector) and T-Systems (system solutions).<sup>97</sup> This

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<sup>93</sup> Annual Economic Report, 2012, p. 26.

<sup>94</sup> Deutsche Telekom, 2014a.

<sup>95</sup> Deutsche Telekom, 2014b.

<sup>96</sup> Deutsche Telekom, 2014b.

<sup>97</sup> Ringe, 2005, p. 66.



basically covers the whole spectrum of the modern information and communication technology.<sup>98</sup>

### 3.7.1 Corporate Identity

The 'T' Brand. T stands for Telekom, and the essence of its brand is the slogan 'Life is for sharing',<sup>99</sup> which is equal to its brand promise to customers. Telekom states, that the life consists of minor and major events where people want to share via phone, Internet and Internet TV.<sup>100</sup> To make this happen, DT's goal is to provide the best possible communication and IT service. Customers should experience and enjoy 'Life is for sharing' anytime and any place. Further, one of Telekom's key priorities behind its brand promise is innovation, competence, simplicity and setting standards. What implies another aim of Telekom - 'connected life and work'.<sup>101</sup>

Corporate identity of DT is closely connected to its activities,<sup>102</sup> such as information and communication technology, among others, its main business is operation and sale of network connections. In the analysis of corporate values, it is noticeable how future-orientated Telekom is. That may be the truth because DT exists no more than 19 years. Yet technology is mostly future-orientated. How Telekom behaves and represents its values and beliefs, it can be take from its so-called guiding principles:

- Customer delight and simplicity drive our action
- Respect and integrity drive our action
- Team together - Team apart
- Best place to perform and grow
- I am T - count on me

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<sup>98</sup> Deutsche Telekom, 2014c.

<sup>99</sup> Deutsche Telekom, 2014d.

<sup>100</sup> Deutsche Telekom, 2014d.

<sup>101</sup> Deutsche Telekom, 2014d.

<sup>102</sup> Ringe, 2005, p. 67.

„However, the Guiding Principles are not only meant for internal use, but also for dealing with Deutsche Telekom's external environment as well. They help emphasize the company's social commitment.“<sup>103</sup>

Furthermore, Telekom is being confronted with the development of society's base of information of knowledge. Consequently it relies on a strong corporate culture, and DT's „corporate culture is a key factor in this development process and the Guiding Principles serve as the cornerstone that forms this culture.“<sup>104</sup> Telekom also has initiated a new strategy to turn into the leading European telecommunications provider.<sup>105</sup> Whatever the case may be, still the mission of corporate's communication is to convey Telekom's brand identity and values.<sup>106</sup>

### **3.7.2 Corporate Design**

Corporate design is composed of corporate culture, corporate communication, corporate sound.<sup>107</sup> When communicating with sound, it needs to correspond with mentioned aspects. For this reason, also the audio-visual communication should therefore be brought under same principles. In its year of establishment in 1995, Telekom states that it is changing continuously and customizing to the requirements according to internal and external evolution.<sup>108</sup> Because its corporate structure enables this flexibility, and from that time its corporate design has been established then later updated.

„Deutsche Telekom is aligning its brand identity with the demands of the digital world and the fast-changing markets. The updated identity focuses on a clear, distinctive and consistent perception of the brand across all customer contact points. At the same time, the new design takes up the form and content of

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<sup>103</sup> Deutsche Telekom, 2014e.

<sup>104</sup> Deutsche Telekom, 2014e.

<sup>105</sup> Deutsche Telekom, 2014c.

<sup>106</sup> Ringe, 2005, p. 67.

<sup>107</sup> Ringe, 2005, p. 68.

<sup>108</sup> Ringe, 2005, p. 68.

Deutsche Telekom's corporate strategy and reflects the growing importance of innovative strength and partnerships in the digital world.“<sup>109</sup>

Telekom's concept of corporate design is reduced to few elements, which can be combined after clearly defined rules. In the core of its Design the 'T' stands for quality, innovation and efficiency, and it is a cornerstone of Telekom's vision and a linking element of the whole corporation.<sup>110</sup> Additionally the 'T' is a promise to its customers, that is surrounded by the 'Digits' or 'Dots.' Latter are little squares which build with the 'T' the five guiding principles. Telekom claims, even with constantly updating its design, the core of its brand identity will not change, and still be highly recognized by consumers:

„The "T", for example, is recognized by nine out of ten people surveyed, the Digits by almost three quarters of customers.“<sup>111</sup>



*Figure 4: Deutsche Telekom Visual Logo*

The Visual Logos below represent four business sectors and the Umbrella Brand <sup>112</sup> Deutsche Telekom. They consist of the typical color of Telekom called 'magenta.' As well the logo is supported by the colors grey white and black. The magenta shade stands out of the white background, and reflects therefore the distinctive design of Telekom.

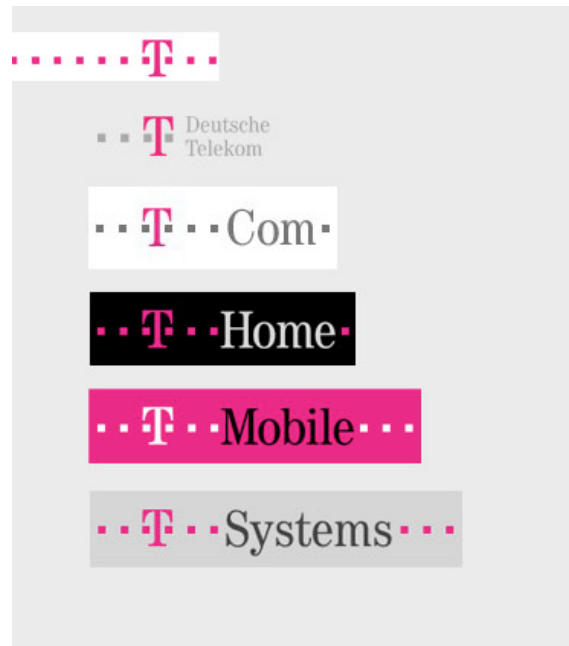
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<sup>109</sup> Deutsche Telekom, 2014f.

<sup>110</sup> Ringe, 2005, p. 70.

<sup>111</sup> Deutsche Telekom, 2014f.

<sup>112</sup> Umbrella Brand - group of products possess the same brand name.



*Figure 5: Deutsche Telekom Business Divisions*

### 3.7.3 Corporate Sound

In 1999 Telekom has introduced its Acoustic Corporate Identity<sup>113</sup> which consists of Corporate Music and a Sound Logo. Following its strategy as a communication provider, Telekom aimed to communicate worldwide with consumers using music and sound as musical Esperanto.<sup>114</sup> Three criteria were defined which were then considered on the design of corporate acoustics:

- Decisive
- Reliable
- Fit

Telekom came up with its Sound Logo already in 1997. It is a combination of sound-visual and sound-name which has built a basis for the Sound Identity. It is very concise and has a length of 880 milliseconds. Its composition consists of five notes: c-c-c-e-c

Click to listen > [Deutsche Telekom sound logo](#)

<sup>113</sup> Acoustic Corporate Identity is equal to Corporate Sound.

<sup>114</sup> Ringe, 2005, p. 71.

The notes 'c' communicate the 'Digits,' whereas 'e' represents the 'T'. Latter is one major third (interval) higher. 'T' is the cornerstone of Telekom's vision, and the core of its corporate design. Therefore, a major third highlights its corporate brand identity. With that, the visual-transfer-effect can be strengthened, even if the animation is only presented soundless.<sup>115</sup> DT's ambitus consists of four semitones which is relatively low, and the melody shows an ascending then a descending shape. These attributes can simplify the recognition and the recall too.

Referring to the notation, it can be assumed that also the verbal analogon consisting of five syllables 'Deu-tsche-Te-le-kom' was deduced and involved to the composition. Syllables emphasize the 'Gestalt' of five notes, rather than the composition itself. All in all, the basis for the notation of Telekom's Sound Logo is build by the five guiding principle, the five objects of the Visual Logo and the verbal analogon of five syllables.

The characteristic timbre (instrumentation) of DT's sound logo is provided by piano. Anzenbacher (2012) claims that a piano sound associates neutrality, integrity and competence.<sup>116</sup> In the higher frequency range the human ear is quite sensitive, and alternatively a piano has specific transients (high amplitude and short duration) which are perceived as activating and present. Hellbrück & Ellermeier (2004) have investigated in hearing referring to physiology, psychology and pathology of the human ear, and state that „Sounds which change or not, or only very slowly over a certain time, rarely have a meaning for people [...]“<sup>117</sup>.

Exploring its musical flexibility, the instrumentation of DT's Sound Logo resounds in several different contexts. During music events like 'Telekom Street Gigs' the electric guitar vests a specific timbre to the sound logo, whereby a proper image transfer is ensured. Bells resound during christmas time, and a synthetic sound resounds as a variation of the sound logo itself. As well as football fanfare which is reproduced during football events. In general DT's simple composition of the sound logo provides space for musical flexibility.

Click to listen > [Deutsche Telekom sound logo variation](#)

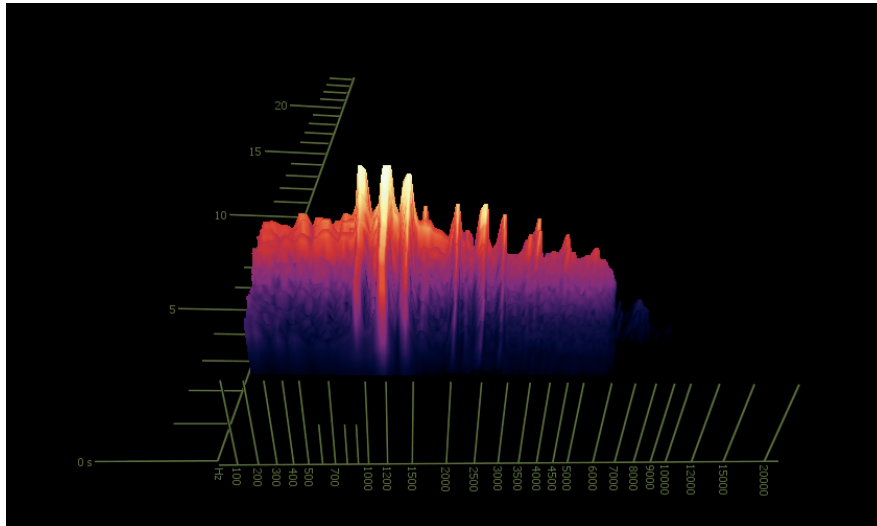
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<sup>115</sup> Anzenbacher, 2012, p. 104.

<sup>116</sup> Anzenbacher, 2012, p. 104.

<sup>117</sup> Hellbrück & Ellermeier, 2004, p. 132. (The german quotation is translated by myself - Schalle, die sich über die Zeit hin nicht oder nur sehr langsam verändern, haben nur selten eine Bedeutung für den Menschen [...])

The figure below shows a Fourier analysis of DT's sound logo which describes technical flexibility. Its frequency range stands between 500 Hz - 5 kHz. Not only by phone, which has a frequency range between 300 Hz and 3,5 kHz, even in the football stadium consisting of quite 70.000 fans, the perception of the Sound Logo is constantly ensured.<sup>118</sup>



*Figure 6: Spectrogram Deutsche Telekom Sound Logo*

The sound logo is mostly applied to emphasize the visual animation of the 'T' and the 'Digits.' Above all, in brand communication it appears mainly in commercials as TV, Internet and Radio.<sup>119</sup> Apart from that, latter shows that the Sound Logo is also reproduced unattached to visual animation. For instance, Deutsche Telekom is the official shirt sponsor of FC Bayern München, and during home matches the Sound Logo is reproduced several times to highlight the brand. But still there is background advertising and a couple of people dressed in white which form Telekom's 'T'.

Deutsche Telekom's Sound Logo was designed to communicate in different contexts over a long time. Its musical parameters may not always be a 'Leitmotiv' or a pattern for others, but as a sounding tool of communication it is characterized by its simplicity and conciseness.

<sup>118</sup> Steiner, 2009, p. 129; Anzenbacher, 2012, p. 105.

<sup>119</sup> Ringe, 2005, p. 74.

### 3.8 BMW

Bayerische Motorenwerke AG was found in 1918 in Munich, and is nowadays one of eleven most valuable brands worldwide<sup>120</sup> and under the top ten global automobile manufacturer.<sup>121</sup> „The BMW Group operates 28 production and assembly facilities in 13 countries and has a global sales network in more than 140 countries.“<sup>122</sup> In 2013 BMW delivered 1.963.798 automobiles with a workforce of 110.351 employees.<sup>123</sup> The generated revenue of 2013 financial year amounts 76 billion Euro.<sup>124</sup> BMW Group is made up of BMW, MINI and Rolls-Royce Motor Cars, whereas BMW Motorrad (motorbike) is a section of the BMW brand.

Beside its production, BMW's image and personal experience play a decisive role of the brand, thus they perform as a strong booster of the fascination BMW.<sup>125</sup> As a consequence, three factors emotionalize BMW's brand, such as production, communication and commerce performance. Still the products are the key of its promise to consumers. And to fulfill its promise BMW Welt (BMW World) was introduced to offer its customers a great experience when delivering a new automobile. The futuristic design of the building provides a multi-sensory brand experience and stands for a straight contact to the public, clients and the brand. Additionally the BMW Museum was reconstructed and stands for the fascination BMW, which shows the process of innovation. Further, and probably most valuable significant signature feature is BMW's headquarter which represents a four-cylinder engine. Lately BMW is operating in sport sponsoring, which include Yachtsport, Golf, Tennis and Motorsports.

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<sup>120</sup> Forbes, 2014.

<sup>121</sup> Steiner, 2009, p.139.

<sup>122</sup> BMW, 2014a.

<sup>123</sup> BMW, 2014b.

<sup>124</sup> BMW, 2014b.

<sup>125</sup> Steiner, 2009, p. 140.

### 3.8.1 Corporate Identity

BMW has a emotional image where its defined values are surrounding the slogan 'Driving Pleasure'. As described in chapter 2.4.1, defined values such as key words or short sequences of words are specified which then form the basis for the name section. The figure below illustrates BMW's brand identity which „[...] is built around the brand idea of 'Driving Pleasure'“<sup>126</sup>.

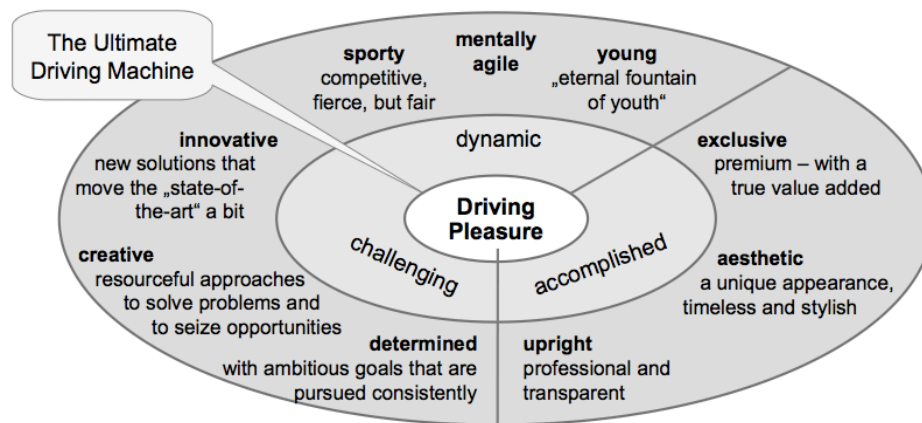


Figure 7: BMW Brand Identity (source Killian 2008)

Killian (2008) claims that the term 'pleasure' is given in every BMW model which is clearly expressed in the brand claim 'The Ultimate Driving Machine'. The original German claim of 'Driving Pleasure' is 'Freude am Fahren' which basically means 'Joy of Driving' that „[...] gets even closer to the original brand idea, whereas the English claim stresses more the source of this pleasure, the engine of the car“<sup>127</sup>. BMW is not just offering another engine, it is offering the 'ultimate' one, which then turns the car into 'The Driving Machine'. The core of the brand 'Driving Pleasure' is then substantiated with brand values such as 'dynamic', 'challenging' and 'accomplished'. Steiner (2009) supports this statement and explains that the success of the brand is based on its deep understanding, which expressed by the features such as sporty, dynamic and 'Driving Pleasure'.<sup>128</sup> BMW stands as the Umbrella Brand for all its products, and therefore its brand identity is relevant for all its products and the target group.

<sup>126</sup> Killian, 2008, p. 36.

<sup>127</sup> Killian, 2008, p. 36.

<sup>128</sup> Steiner, 2009, p. 143.



BMW's strategy is to set its brand identity clearly apart from the competitors. After Killian, this is one of four main requirements for a strong brand identity: differentiation. With that, ideally all 'points of difference' should be managed across all five senses (multi-sensory). Taken together, BMW is one of the leading corporations referring to corporate identity,<sup>129</sup> and the constant progression of its corporate identity represents a significant key success factor.

### 3.8.2 Corporate Design

When starting to cooperate with the Swiss corporate identity agency 'Interbrand Zintzmeyer & Lux', the first decision was to reduce the color blue and replace the background with white color, because white provides a good contrast as a background. The BMW Visual Logo was slightly adapted and its use strongly reduced. BMW was told to follow the principle of „valuable is only what is rare“<sup>130</sup>.



*Figure 8: BMW Visual Logo within the Slogan*

The inner core of the visual logo is composed of colors white and blue, which usually represent the Federal State of Bavaria within its white-blue flag. Further, BMW utilize silver and black colors to communicate optimally with the target group and to be flexible within its brand values. Referring to the website of BMW (BMW, BMW Motorrad, Mini, Rolls-Royce Motor Cars), one can conclude that the use of graphic and font design carry out many advantages for BMW. Indeed, consumers were complaining about the loading duration of

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<sup>129</sup> Steiner, 2009, p. 145.

<sup>130</sup> Steiner, 2009, p. 148. (The german quotation is translated by myself - „wertvoll ist nur was selten ist“).

BMW's website, because of the high quality pictures and graphics that were implemented to the website, but this structured corporate design is able to cause cognitive dissonance at consumers, especially at those after buying a BMW's product.<sup>131</sup>

In 2007 BMW Design Team was awarded with the 'red dot design Award'<sup>132</sup> for excellent and innovative Design. Its secret of success is the creative variety, so Chris Bangle (BMW's Designer). He also claims that the quality of design cannot be evaluated objectively. To arouse desires a good design should reach consumers at all touch points, or senses, respectively.

### 3.8.3 Corporate Sound

In 1999 BMW has introduced its sound logo colloquially know as 'Gong Gong' or 'Doppelgong'. It was developed by specialty department of BMW, Zintzmeyer & Lux and Jung von Matt agency to emphasize the brand claim 'Driving Pleasure'. For the design of the Sound Logo four criteria were defined which were taken into consideration:

- Fit
- Memorability
- Flexibility
- Internationality

The notation of BMW's Sound Logo consists of two half notes with a length of approximately two seconds.

Click to listen > [BMW sound logo](#)

In comparison to Deutsche Telekom, the basis for BMW's sound logo character refers to the slogan 'Driving Pleasure', rather than to the the visual logo shape. To accentuate 'Driving Pleasure' two half notes form the composition without an ambitus. Thus, the sound communicates 'accomplishment', because two half notes are reproduced in a time interval of approximately 500 milliseconds, which is enough two perceive two sound objects

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<sup>131</sup> Steiner, 2009, p. 148-149.

<sup>132</sup> Red dot design Award - one of most important quality assurance awards world wide.

separately<sup>133</sup>. Its characteristic timbre (instrumentation) is provided by shutting cylinder sound. The recorded sound of BMW's shutting cylinder is extracted which then forms the instrument (keynote sound). By doing so, this symbolizes BMW's technological appeal and engineering.<sup>134</sup> Further, the shutting of the cylinder once again emphasizes 'accomplishment'. The reason for utilizing cylinder sound instead of a musical instrument, dates from the importance of the BMW's headquarter, the four-cylinder tower. Further, the cylinder is a significant part of the engine and therefore a substantial component of BMW's products.

Since the composition of the sound logo does not form a chord with an ambitus, musical flexibility seems to be low<sup>135</sup>. Further, the sound character is composed of a cylinder recording which consists of individual and complex sounds. Anzenbacher (2012) is of the opinion that sound logos made up of synthesized and vocal sounds (complex sounds), would lose their character when being reproducing by other musical instruments. On the other hand Anzenbacher (2012) claims that sound logos composed of classical musical instruments could easily be replaced by other instruments or voices without being interpreted wrongly.

When looking at the sound logo by the Fourier analysis, it shows the most amount of sound in a frequency range between 100 Hz and 300 Hz, whereas the Sound Logo ranges overall between 100 Hz and 3 kHz.

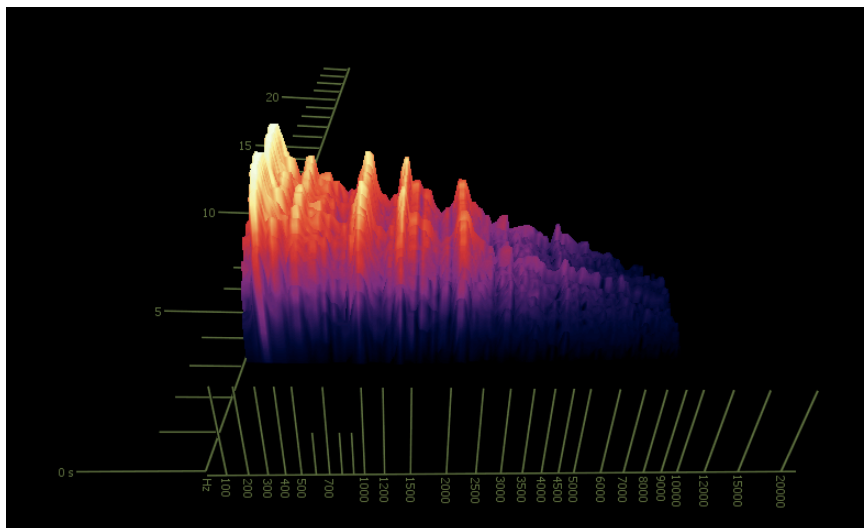


Figure 9: Spectrogram BMW Sound Logo

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<sup>133</sup> Anzenbacher, 2002, p. 149.

<sup>134</sup> Steiner, 2009, p. 151.

<sup>135</sup> Anzenbacher, 2012, p. 146.

It can be concluded that the sound logo fulfills technical flexibility, where it can be reproduced on different media platforms. It is mainly designed to enhance the visual medium, where its application mostly takes place in television and cinema. Meanwhile ‘Doppelgong’ is also reproduced unattached to the visual animation, where it appears on the radio as well.<sup>136</sup>

### 3.8.4 Evolution

It can be questioned reasonably how much sound logos are flexible over a time in comparison to visual logos. Visuals can be slightly adapted without any coherent change to given values. This subchapter demonstrates how an existing sound logo was replaced by another one, which ultimately gives rise to questions in acoustic communication of branding.

In March 2013 BMW has introduced its new sound logo due to representation of different aspects of the BMW brand identity.<sup>137</sup> The new logo is a totally new composition which should emphasize ‘innovation’ and ‘dynamism’. Referring to that Joachim H. Blickhäuser, head of corporate and brand identity at BMW Group states as follows:

„Acoustic elements are an important aspect of the BMW brand appearance. As part of the evolution of our acoustic branding, we are replacing the “double gong” used for the past 14 years with a new sound logo, which gives the brand a distinctive modern, aesthetic and dynamic recognition factor and can be used in many different ways worldwide.”<sup>138</sup>

Click to listen > [BMW Sound Logo New](#)

The new sound logo comprises several sound elements. Especially the ‘reverse’ is clearly audible and at this, sound elements are played forwards and backwards to symbolize in some way ‘Mobile Flexibility’<sup>139</sup>. BMW states: „The melody is introduced by a rising,

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<sup>136</sup> Steiner, 2009, p. 153.

<sup>137</sup> BMW, 2014c.

<sup>138</sup> BMW, 2014c.

<sup>139</sup> Mobile Flexibility defines hybrid automobiles and future electric cars and motobikes.

resonant sound and underscored by two distinctive bass tones that form the sound logo's melodic and rhythmic basis."<sup>140</sup> BMW also said that the new sound represents 'Sheer Driving Pleasure' as well as 'joy of progress and dynamism'. Still it is not clear how the new Sound Logo of BMW affects the brand values and the interaction between consumers.

Given example of BMW's new sound logo brings up some questions referring to the utilization of sound logos in acoustic communication. From cognitive point of view, certain brand sounds are already learned by consumers through countless perception, while new sounds must be learned, stored and retrieved. Latter evokes the so-called 'recall' of informations when a known sound triggers human memory. Furthermore, it can be questioned which values are aimed to be communicated by sound. As already described, communicating with the strongest brand values which remain over a long time could be suited better for a proper acoustic communication. Therefore an existing Sound Logo could slightly be adapted over a long period of time, instead being recomposed from scratch. With that said, one has to wait and see how a replaced sound signature affect recipients, and it can be evaluated after a certain period of time.

### **3.9 Holistic View of Sound Logos**

Sound logos can also cause negative associations at recipients (consumers). As a result, a poor design of a sound logo can cause a manipulative effect on consumers,<sup>141</sup> because, over and over similar sound logos are reproduced, and there is a reason for that. Designers ignore or do not correctly evaluate target group's needs. Further, the progress shows that often a few sounds are attached at the beginning and at the end of a TV spot. Indeed a media impact is aimed, that finally often ends in a acoustic environmental pollution, so Steiner (2009).<sup>142</sup> Therefore the creative part of a sound designer may be recognized as very important. The result could include criteria given in chapter 3.5, which not only avoid image damage,<sup>143</sup> as well a licensing issue. For instance, In 2008 Mercedes-Benz discontinued its sound logo campaign. The decision of the refusal was a

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<sup>140</sup> BMW, 2014c.

<sup>141</sup> Steiner, 2009, p. 62.

<sup>142</sup> Steiner, 2009, p. 62.

<sup>143</sup> Ringe, 2005, p. 63.

very poor sound design. The authorized advertising agency Jung von Matt has used a sample from the sampling CD 'Symphony of Voices'<sup>144</sup> Under unusual circumstances Mercedes-Benz got the license of this sample which was already in legal circulation for a long time.<sup>145</sup>

Click to listen > Mercedes-Benz sound logo

Moreover, uncontrolled application and design of sound logos earn criticism from experts. Ringe (2005) offers skeptical statements, such as a lack of practical experience. As well he claims that the discipline of sound branding is young, thus, it is also still provided with little relevant literature, where a objective and profound critic is still not really enabled.

„To the present, the work of sound designers for most part is based on their own experience, intuition and conjecture. There is a lack of studies that show how much sound can promote corporate's identity.“<sup>146</sup>

The statement (quotation) above is supported by Kloppenburg & Herzer (2009), while standarized approach of development of corporate sound does not exist yet. In addition, which musical parameters, samples or recordings are from coherent importance, can therefore still not be clearly exposed, because the transfer of brand identity to sound identity is a subjectively embossed and theoretically imperfect comprehensive process.<sup>147</sup> Notation, rhythm, melody instrumentation and tempo are characteristics which have to be taken into consideration. Anzenbacher (2012) has compared several sound logos of major corporations, and concludes that most of them are composed of a melodic character, rather than of a noisy (sound) content.<sup>148</sup> On the other hand, sound logos with or without melodic character still could not highlight their relevance when considering the evaluation of them.

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<sup>144</sup> Esse est percipi, 2014.

<sup>145</sup> Digital Audio Service, 2014.

<sup>146</sup> Ringe 2005, p. 63. (The german quotation is translated by myself - „Bis heute basiert die Arbeit der Klang-Kreativen zum größten Teil auf eigene Erfahrung, Intuition und Vermutung. Es fehlen Studien die zeigen, wie sehr Klang die Unternehmensidentität fördern kann.“)

<sup>147</sup> Kloppenburg & Herzer, 2009, p. 92.

<sup>148</sup> Anzenbacher, 2012, p. 148.

## **Part Three - The Sound Logo Design**

## 4. Sounds of Football - Designing a Sound Logo for FC Porto

After the implementation of two case studies which provide a solid basis for a sound branding design, this chapter deals with the approach and the production of the sound logo for FC Porto.

Beginning with the observation of FC Porto's environment, a vital part is the analysis of brand identity which in most cases builds a basis for a sound identity. As already described in chapter 2.2, even if differences between football clubs and conventional corporations can be observed, a communication with its consumers or supporters should be ensured due to not only image transfer and image building, as well to loyalty. An observation of club's territory highlights a deeper understanding of club's environment and the interaction with supporters and consumers, respectively.

Referring to the design of the sound logo prototype, given suggestions and solutions in this chapter are then described which triggered off thinking processes and led then to the final proposal of the sound logo concept. This chapter ends with a detailed report of the sound logo design process as well as the tools used throughout the process of the composition and sound design.

### 4.1 About Futebol Clube do Porto

Futebol Clube de Porto was found in September 1893 by the Port Wine merchant António Nicolau d'Almeida, who discovered football due to its business trips to England. The foundation of the club was „dedicated to the practice of the eccentric English game of football“<sup>149</sup>. In 1906 FC Porto became officially a sport club, while in 1907 the headquarter was established. Followed by the design of the club's first Visual Logo in 1910, in 1913 FC Porto has got its first stadium.<sup>150</sup>

With the foundation of Primeira Liga in 1934 FC Porto became the first portuguese football champion. Until today, FC Porto builds beside SL Benfica and Sporting Lisbon the 'Os Três Grandes', the big three, which are with the exception of Belenenses and FC Boavista, the only three clubs who ever won the portuguese league title.<sup>151</sup> Meanwhile FC

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<sup>149</sup> UEFA, 2014.

<sup>150</sup> FIFA, 2014.

<sup>151</sup> FC Porto, 2014a.



Porto has achieved 27 League titles and 16 Portuguese Cup titles. Furthermore, after winning the first European Club's Cup in 1988, FC Porto has then risen to Europe's top clubs<sup>152</sup>. Altogether the club records 10 international trophies including two Intercontinental Cups, thus „FC Porto became the most titled portuguese club“<sup>153</sup> with 74 trophies. Beside its successful past the club's membership amounts more than 100.000 members. This fact is a further indication how football as a brand act not only as an image carrier, as well it provides loyalty and commitment and causes emotions to consumers. Because an official membership causes fees, and as described in chapter 2.1, a football supporter has a dual role, as consumer and as image carrier.

Considering the Management report of 2013, FC Porto has generated a revenue of more than 78 million Euro and a profit of more than 20 million Euro.<sup>154</sup> The most operational gain was generated by the admission to UEFA competitions (international competition).

*values in thousand euros*

Operational Gains, excluding the trade of passes	2012/2013	%	2011/2012	%
Merchandising	2.786	4%	3.166	4%
Tickets	6.521	8%	10.631	15%
UEFA Competitions	20.390	26%	14.199	20%
Other Sporting Revenues	1.136	1%	1.499	2%
TV rights	13.185	17%	12.300	17%
Publicity and Sponsorship	13.067	17%	13.242	18%
Corporate Hospitality	15.161	19%	10.472	15%
Other Services	5.091	6%	5.715	8%
Other Gains	1.105	1%	960	1%
<b>TOTAL</b>	<b>78.441</b>	<b>100%</b>	<b>72.184</b>	<b>100%</b>

*Figure 10: FC Porto Operation gains*

The clubs main incoming is the football game where tv rights result as a consequence of not only competed competitions, also because of FC Porto's contract with Publicidade de Portugal e Televisao for the use of exclusive rights to audio-visual communication.<sup>155</sup> These are national and international football events, as well as friendly matches. Club's „merchandising revenues went down by 12% in comparison to the previous

<sup>152</sup> FIFA, 2014.

<sup>153</sup> FC Porto, 2014a.

<sup>154</sup> FC Porto, 2014b.

<sup>155</sup> FC Porto, 2014b.

exercise[...]"<sup>156</sup>, on the other hand the club has opened two new fan shops (blue store) in 2013.

Club's main sponsor of the season 2012/2013 were Portugal Telecom, Unicer and Nike. Latter has been replaced in 2014 when FC Porto signed a new contract with the manufacturer of sports equipment called Warrior. The revenue of sponsoring in comparison between 2012 and 2013 went slightly down. The tv channel 'Porto Canal'

Nevertheless, to gain its brand equity and ensure constant communication with consumers, in 2011 FC Porto has announced a partnership with Porto Canal. Shortly afterwards the club has assumed the management of the tv channel. FC Porto states as follows: „The agreement is the first step in a plan that will help to strengthen the communication and marketing of FC Porto channels, particularly in terms of television, new media and social tools.“<sup>157</sup> Porto Canal launched two FC Porto related programs, 'Flash Porto' and 'Somos Porto'. Additionally the channel broadcasts live matches of FC Porto basketball, handball and roller hockey. In terms of brand communication, it can be assumed that FC Porto is constantly communicating its brand values to ensure its brand equity.

The continuous growth of the club over the past has let not only to the expansion of the infrastructure, also to the enlargement of its facilities. FC Porto's facilities are spread all around the City of Porto. Probably the most significant feature of the club is Estadio do Dragão, with a capacity of ca. 52.000 where all home matches are hold. The stadium was complete and inaugurated in 2003 due to EURO 2014 in Portugal. Some time ago the club introduced its brand new museum, the Museu Futebol Clube do Porto with the slogan 'A Dragon Lives Here'. The blue and white space with all the trophies and valuable objects offer a multi-sensory experience for the consumers and supporters, respectively.

Further the club holds the Dragão Caixa facility where basketball, handball and roller hockey take place. Additionally, the brand new training center Centro de Treinos e Formação Desportiva PortoGaia set in Vila Gaia de Nova was opened in 2002, which includes a mini stadium with a capacity of 3.000 seats.<sup>158</sup> Under the slogan 'Dragon Force' FC Porto promotes young football talents at the Vitalis Park. And for the junior players of FC Porto the renovation of the blue and white space of Casa do Dragão offers not only

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<sup>156</sup> FC Porto, 2014b.

<sup>157</sup> Maisfutebol, 2014. (The portuguese quotation is translated by myself - O acordo é o primeiro passo de um plano que permitirá o reforço dos canais de comunicação e marketing do F.C. Porto, nomeadamente a nível da televisão, novos media e ferramentas sociais)

<sup>158</sup> FC Porto, 2014a.

basic training courses, also many essential infrastructure for the development of athletes<sup>159</sup>.

By now, mentioned facilities also operate as platforms where consumers interact with brand messages at all touch points. To understand not only the importance of branded facilities, as well as the interaction between spectators and organizer (club), in march 2014 a meeting and a stadium tour during the match FC Porto - Belenenses with those responsible of FC Porto was arranged. Waiting in front of Estadio do Dragao's main entrance suddenly A-ha's song 'Take on Me' resounded to signalize open doors to the stadium. At this point, communicating with musical content seems to be one of club's communication strategies. Nevertheless, one can dubious if mentioned song is a part of club's integrated marketing. By all means, a clear statement of club's responsible did not carry out clarities. The control room of the stadium includes a full dozen of engineers who permanently control and drive audio-visual content before, during and after the game.



*Figure 11: Audio Control Room of Estadio do Dragao*

Figure above illustrates the audio control section where line array loudspeaker are triggered. Beside that, before every game a music playlist is compiled which concludes advertisement and reminder (see attachment). Furthermore, taken from the list one can determine FC Porto's self-promotion. A constant broadcast of brand message occurs, whereas the content is reproduced mostly audio-visual and without any constant Sound Identity. The anthem of FC Porto's (Hino FC Porto) is the only constant sound communication composition and a crucial part of the interaction between spectators and

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<sup>159</sup> FC Porto, 2014c.

the club. On the other hand, the club could not state the integration of the anthem to its marketing strategy.

The tour through the stadium's corridor shows conceptual implementation of club's Corporate Design. The interior including sponsors' shops build a consistent construct of blue and white and the brand FC Porto, respectively. (see attachment).

During the game there is only visual content reproduced, which mostly include sponsor's advertisement. Bit by bit club's animation of the Visual Logo is displayed to enhance commitment and emphasize club's brand values. All things considered, FC Porto has a highly recognized image referring to its design, not only that, the stadium offers high quality conditions where a constant and emotional interaction between the club and its spectators maintains.

Taken together, FC Porto has a solid infrastructure to ensure livelihood and generate a long-term profit maximization. Its facilities offer a multi-sensory experience to consumers and stand therefore in a straight contact to the public, clients and the brand. Under those circumstances the proximity to its supporters ensures commitment and loyalty. And referring to the communication, Porto Canal provides a solid platform to strengthen not only the brand, also the communication to its supporters, consumers and prospects.

## **4.2 FC Porto's Identity and Corporate Design**

FC Porto stand for Futebol Clube de Porto, but its sporting activities are expanded also to handball, basketball, roller hockey, pool table and many more. So the brand FC Porto operates as an Umbrella Brand. Club's ambitions include growth and success in any of mentioned sports. Not only to its partners, as well as to consumers FC Porto transmits:

- Confidence
- Quality
- Reliability
- Success

After the club, FC Porto is a reliable partner which stands for confidence, quality and success. Due to the progress of its brand identity, club's football players became known as 'Dragoes'. The club describes the 'Dragon' as a dominant form, over it the heaven which

probably demonstrates infinity and therefore provides never-ending success, and underneath a notable collection of trophies<sup>160</sup>.



*Figure 12: Dragoes Visual Logo*

The mythological creature is also a Chinese astrological symbol, it can be observed and its known as draco constellation. Nowadays the Dragon brand became extremely strong identified with FC Porto. Meanwhile the club has initiated and integrated several campaigns and facilities referring to the name 'Dragao'. The FC Porto fans known as 'Portistas' are a essential part of club's identity. It could be observed that fan's relationship to the club consists of an emotional commitment. This is impressively demonstrated during home matches of FC Porto, where its supporters constantly encourage the players during the gameplay through cheering and fanfare. On the other hand the club is immortalizing each member's name on glazed tiles in the corridor of the stadium to highlight solidarity and loyalty. This is another indication of an emotional and indispensable relationship between the club and its supporters. This fact is supported by FC Porto's new campaign 'sempre preparados'. With its brand new manufacturer of sports equipment Warrior, the club promotes not only strength and willingness with the slogan, also it expects being „[...] pushed forward by the army at their disposal, the fans“.<sup>161</sup>

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<sup>160</sup> Museu do FC Porto, 2014.

<sup>161</sup> FC Porto, 2014e.



*Figure 13: Sempre Preparados Campaign*

It can be concluded that FC Porto's identity is close to its activities, and that its supporters are constantly incorporated to club's identity, or being constantly a part of club's identity. Referring to corporate design, FC Porto's visual logo and the colors blue and white go back to a time when Portugal's national flag was decorated in blue and white. The main idea was to represent not only the town of Porto, also the whole country when competing against foreign teams. Today club's visual logo is a slightly adoption over many years where blue and white still dominate.



*Figure 14: FC Porto Visual Logo*



It is labeled with 'Invicta' and 'Civitas Virginis' which stand for invincibility and broadly speaking for liberty. The crown on the top of the ball goes back to the time of the Kingdom of Portugal and Algarves which existed until 1910. Club's colors are the basis of its corporated design. Over years also the official jerseys were slightly changing due to the change not only because of the sport equipment sponsors, also because of technological advance of textile fabrics, in other words to offer the players high performance equipment<sup>162</sup>.



*Figure 15: FC Porto Home Jerseys in blue-white*

As it can be observed FC Porto's design in blue and white is passing and decorating its interior and exterior communication, and stands for a unmistakeable brand recognition. By now main aspects of clubs identity and design were expound. As a result the next subchapter outlines the practical process of sound logo design.

### **4.3 Sound Logo Design**

After the analysis of FC Porto's brand identity and the approval of the importance of territory, this chapter will complete the research project with a detailed outline of the sound logo design for FC Porto.

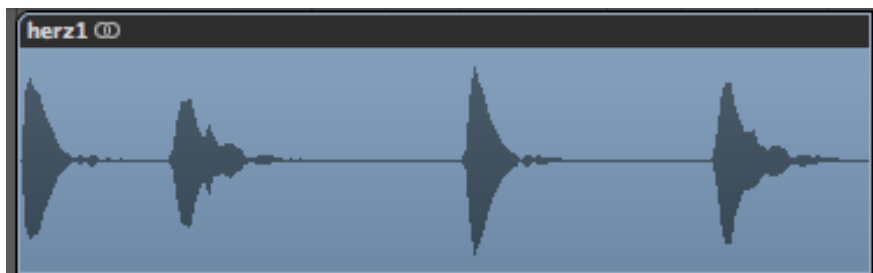
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<sup>162</sup> FC Porto, 2014e.

Following its values as a football club, FC Porto aims to communicate not only national wide also international wide. Therefore, four criteria were defined and considered on the design of the sound logo:

- Confidence
- Quality
- Reliability
- Success

The sound logo of FC Porto is an adaption of a heart beat with a composition length of 2,15 seconds. The basis for the rhythmic character is composed of the four syllables referring to the verbal analogon of 'F-C-POR-TO'. The Gestalt of four notes emphasizes not only the mentioned syllables, also the four values of the club and especially confidence. Because, a heart beat is so human, that for each of us this fact is confiding or trusting According to the brand identity and especially for what FC Porto stands for, they can be represented properly through a concise notation without an ambitus.



*Figure 16: Heart Beat*

The decision to do not comprise an ambitus in the notation relies on the four values of FC Porto. They are equally important and should not be highlighted individually. For the instrumentation it was decided to utilize a re-recorded kick, rather than a musical instrument. The reason for that, is to simulate a double hear beat, which in turn transmits also an emotional sensation. Because the relationship between the club and the fans shows a very strong commitment. The four notes hold a rhythmic-metrical structure in favor of memorability. To achieve a distinctive timbre of the hear beat, higher pitched crowd sound accomplishes the rhythmical-melodic basis (see figure 17).



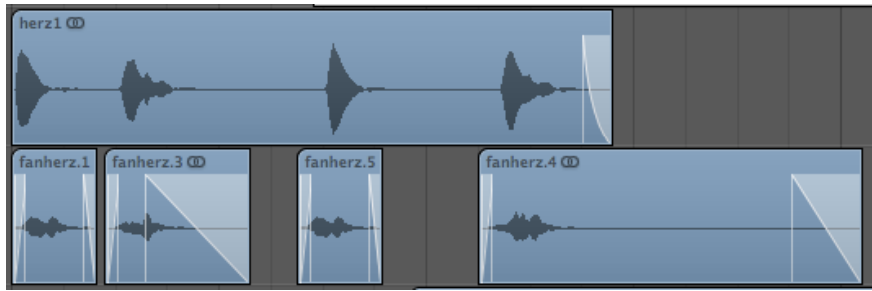


Figure 17: Heart Beat Melodic

As noticed in chapter 3.3, soundscape is from a coherent meaning not only to a certain territory or landmark, also for general well being. Soundmarks of a territory provided distinctiveness and therefore, its consideration to sound design is a significant feature. It was decided to record the typical soundmark of Estadio do Dragao, the cheering and chanting sound of the terrace, and the sound of the stadium's corridor. Latter provides uniqueness of the architectural construction of the stadium. The sound of 'Portistas' is a significant feature of FC Porto, so the extracted sounds of cheering and chanting of fans reflect the soundscape of club's landmark. The recorded sounds during a match of FC Porto were clustered together to create not only an unique and distinctive sound collage, but also to emphasize club's unique sound territory and one the important brand identity attributes, the involvement of club's supporters. The collage sound has an ascending character which should emphasize reliability or success, and club's ambitions in the future. Because, reliability is closely connected with expectations. As well the club and its partners and supporters expect success, which on the other hand establishes the attribute of reliability.

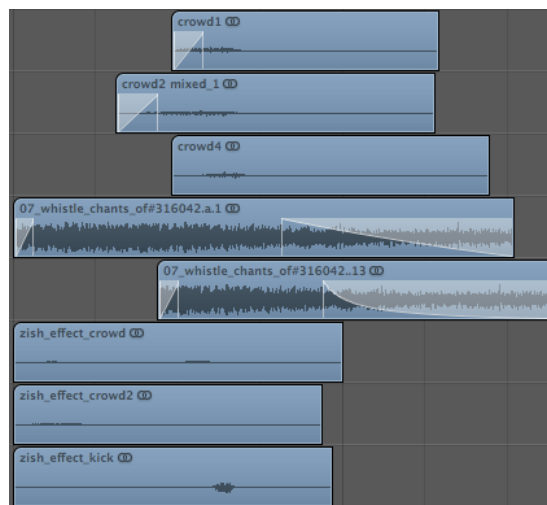


Figure 18: Sound Collage of Cheering and Chants

Considering the musical flexibility, the sound logo shows lacks indeed. The reason for composing a sound logo with a less musical flexibility should represent the club without loosing the sound logo's character, as it is the case of the BMW sound logo. Not only that, musical flexibility can also be achieved through the extraction of single sound elements.

The figure below shows a Fourier analysis of the sound logo which describes technical flexibility. Its frequency range stands between 100 Hz - 7 kHz. The perception of the sound logo is constantly ensured during the playback not only in the stadium, also in tv and web based application.

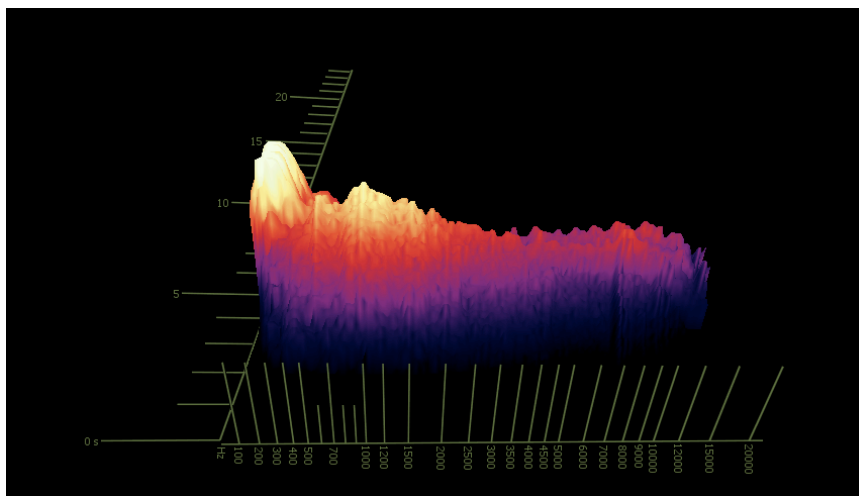


Figure 19: Spectrogram FC Porto Sound Logo

Click to listen > [FC Porto sound logo](#)

Overview of the Sound Logo Features:

File format: Stereo, 44,1 kHz and 16 bit

Number of sound events: 5

Time interval: 100 ms - 150 ms

Sound category: Rhythmic-melodic

Instrumentation: Kick, Soundmarks (Soundscape)

General progression: Wavelike/Ascending

Length: 2s

- **Memorability:** In term of memorability a sound logo shows a rhythmical-metric structure of four sound events. Even if an ambitus is not composed, the intervals of 100 ms and

150 ms between the kicks allow quick changes, which have an affect on the perception, that on the other hand tag the sound as significant (see chapter 3.7.3). Due to the fact that memorability is difficult to quantify, an evaluation of the sound logo in the future work is required to highlight the fact of memorability.

- **Distinctiveness:** By the use of cheering and chanting sounds of the terrace of the Estadio do Dragao, a distinctive manner could be achieved. As soundmarks describe ones territory as unique, implicated sound elements highlight a characteristic performance.
- **Conciseness:** The sound logo has a length of 2,15 seconds. The fact that sound logos which were presented in chapter 3.5.1 have an average length of approximately 2 - 3 seconds, a refusal of consumers may not take place due to the fact that the sound logo does not exceed a certain length. As a consequence, its application is possible over a long time, and over different application areas or cross-platforms.
- **Musical and technical flexibility:** In terms of musical flexibility the sound logo shows lacks indeed. The reason for composing a sound logo with a less musical flexibility is to represent the club without loosing the sound logo's character, as it is the case of the BMW's sound logo. Not only that, musical flexibility can also be achieved through the extraction of single sound elements. In therms of technical flexibility. Its frequency range stands between 100 Hz - 7 kHz. The perception of the sound logo is constantly ensured during the playback not only in the stadium, also in tv and web based application.
- **Fit:** It expresses if a sound logo matches or conforms with brand values, or demonstrate its relevance to the brand. Taken four sound events to emphasize four given brand values of FC Porto, reflect club's identity. As well as the implication of the ascending soundmark, which also highlight the importance of the supporters. It is necessary to evaluate the sound logo in the early future. Especially to proof if the sound logo is reliable or if it shows an adverse effect.

## 5. Tools

For this research study, following tools were consulted to support not only the design of the sound logo, but also the preparations for the observation:

- Mac Book Pro 15“ 2.6GHz quad-core Intel Core i7 processor and 8GB of 1600MHz DDR3 memory
- Logic 9 DAW
- Wave bundle Plug-ins
- Izotope Insight Spectrogram
- Shure SM 58 microphone for foley editing
- Neumann U87i microphone for foley editing
- Digidesign Mbox 2
- Roland r-05 stereo field recorder for soundscape recording
- Apple Pages word processor

The research project was accomplished in the time period between December 2013 and July 2014. The observation of FC Porto's Estadio do Dragao was performed in March 2014 before and during the football game FC Porto vs. Belenenses Lisboa.

## 6. Conclusion and Future Prospect

Over the last forty years football clubs gained its activities beyond the pitch and the game itself. As a result, today clubs became global enterprises, where a constant interaction with consumers kept up. This fact emphasizes the technological development of modern football stadiums, where a multi-sensory experience is continuously ensured. Communication of sound and music has a long tradition. In turn, communicating with conceptual sound within integrated marketing still makes a progress. The multidisciplinary field of sound branding is a young science. Beside the sound design, its process and techniques, the transmission of brand identity and values, respectively, need to be explored to ensure an appropriate design of sound logos. As the case stands, a guideline for the creative part of sound design does not exist yet. Examples presented in the chapter 3.6.1 demonstrate that different aspects of one's brand identity are conveyed through diverse sound design techniques. Melody, rhythm or timbre, just to mention some of the musical parameters, indeed have reached a certain universality, where a general approach can be registered. On the other hand, it seems obvious that a matter of interpretation of certain sound logos emphasizes its 'Gestalt'. Results in this case study show, that the impact of sound logos on consumers, when considering its function could be established. Even the fast advances in digital technology over the last decade, especially mobile phones and the Web, have irrevocably changed the way we respond to certain stimuli, particularly sound, an overflow of perceived sounds, including noise, makes a clear separation between function and non function more difficult. Therefore, sound logos need to be trained to be memorizable. Indeed, this can be ensured by the implication of sound logo design criteria, otherwise clear touch points and a constant playback of sound logos can asset the learning effect and cause differentiation. Nevertheless, to achieve an appropriate result, a close cooperation with the client should be a must. Experts claim that even workshops over a long period of time should take place. Because, it seems that employees of one corporation know very well its structure and understand the values which need to be conveyed. This research study has shown that the design of sound logos and its application can achieve an appropriate result. But referring to the evaluation of sound logos after a long time period, the literature and the practice point out lacks of the evaluation methodology. It remains to be seen if sound logos have a positive future prospect. Considering the very young field of 'augmented reality', where a direct or indirect view of real-world environment is augmented by computer generated sensory input, its

application to sound branding could supplement the interactive communication, where a further, strong-attentive touch point of brand communication can be established.

In terms of the future work this research project should provide a solid basis for additional cooperation with FC Porto up from September 2014. It is aimed to develop a conceptual sound identity for the club and the Estadio do Dragao, respectively. It is assumed that the methodology applied to the practical proceeding of this project might conclude other preconditions when designing not only a sound logo, as well further elements of sound branding. Because in football, the interaction between organizer and spectators may require other aspects which then could be utilized. In the close future, the practical part of this work will be reviewed throughout the evaluation by FC Porto.

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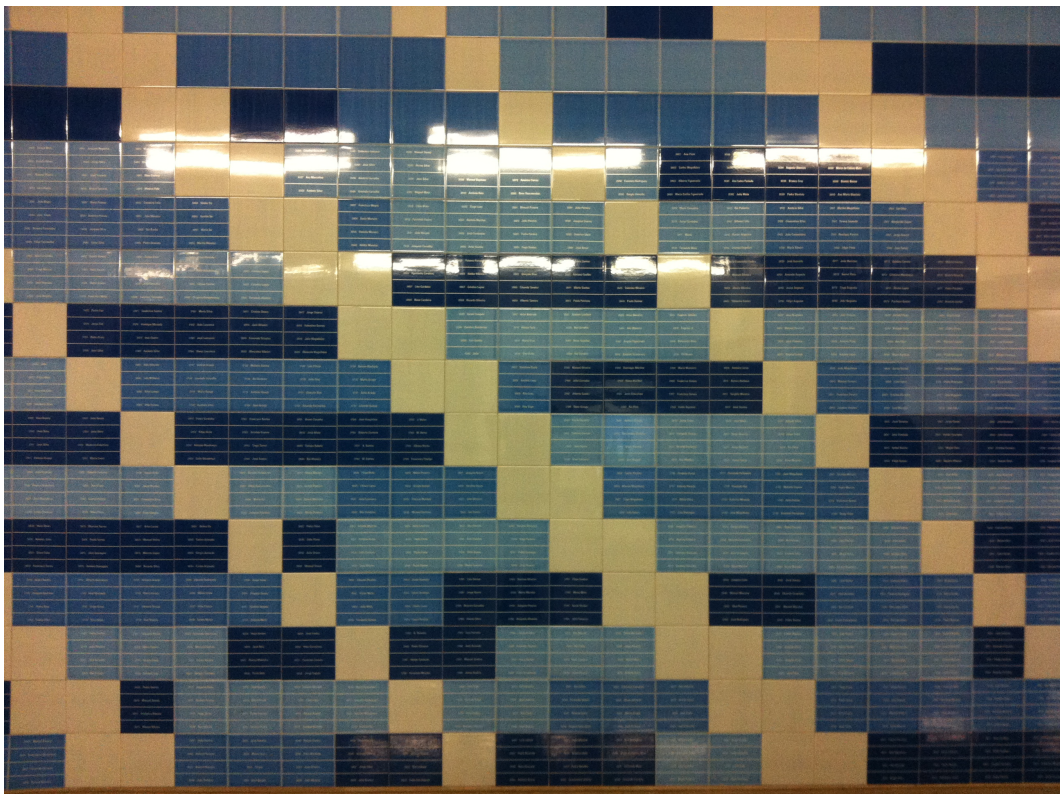
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## 9. Attachments

### FC Porto stadium observation









# Stadium Music Playlist

**PortoEstádio**

## Alinhamento

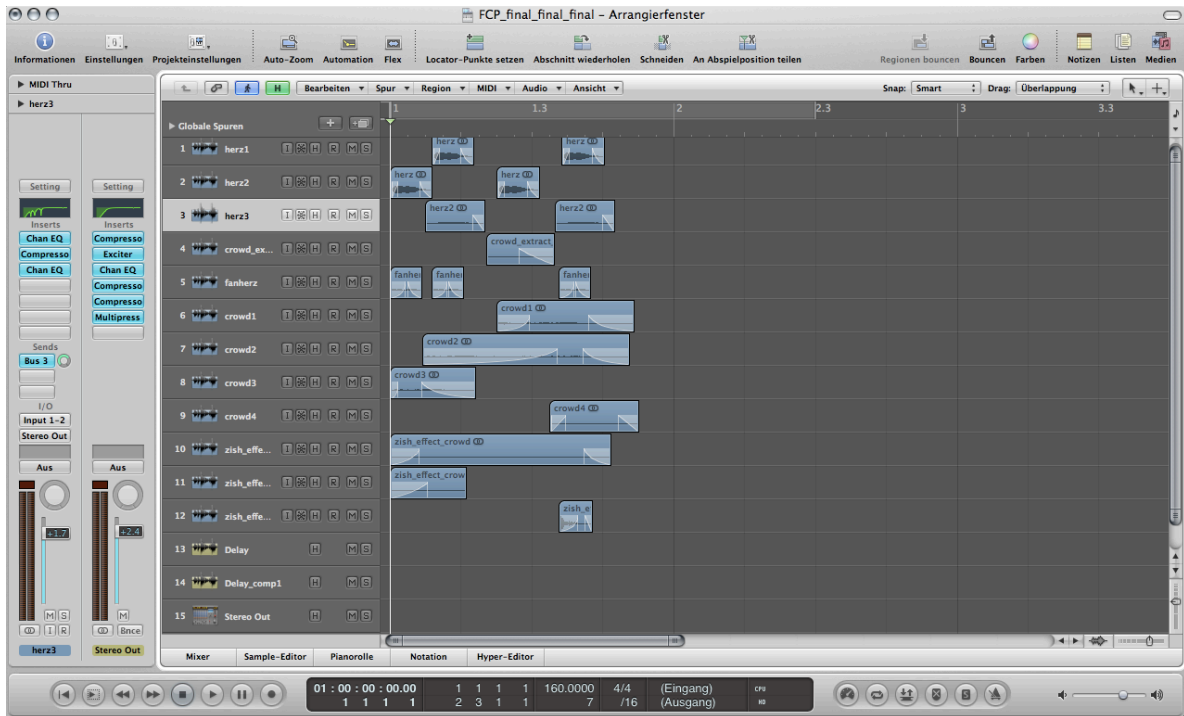
Evento: Jogo de Futebol FC Porto x Belenenses

Data: 23/03/2014 Hora: 19h15

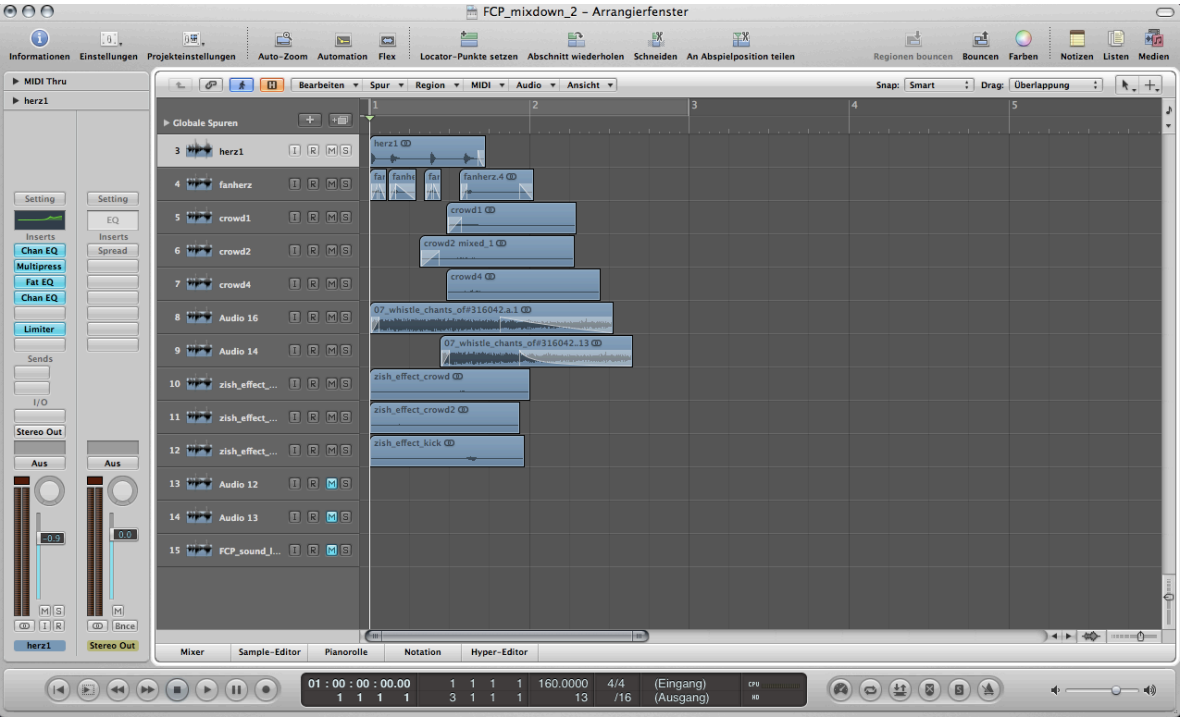
Horas	Duração	Ecrã	Som	Estádio - Relvado
17:45:00		Abertura de portas		
18:25:00	0:05:21	Publicidade 1	Video	
18:30:21	0:00:10	Metro	Video	
18:30:00				Início previsto do aquecimento
18:30:31	0:00:40	Dragon Force	Video	
18:31:11	0:00:30	Museu FC Porto	Video	
18:31:41	0:00:20	Produto de jogo	Jpeg+JL Branco	
18:32:01	0:01:45	Promoção '31 anos de presidência, 31 decisões'	Video	
18:33:46	0:06:14	Publicidade 2	Video	
18:40:00	0:02:42	Uprinter 3D - Making of	Video	
18:42:42	0:00:15	Promoção FC Porto Vitalis x Águas Santas	Jpeg+JL Branco	
18:42:57	0:00:15	Promoção FC Porto x Benfica	Jpeg+JL Branco	
18:43:12	0:00:15	DF Campo de férias Pascoa	Jpeg+JL Branco	
18:43:27	0:00:15	Revista Dragões	Jpeg+JL Branco	
18:43:42	0:00:15	Promoção FC Porto Vintage x Deportivo	Jpeg+JL Branco	
18:43:57				
18:47:00	0:01:49	A vencer desde 1893	Video	
18:48:49	0:00:30	Anuncio FC Porto x Belenenses	Video	
18:49:19	0:02:00	Apresentação Adversário	Grafismo + JL Branco	
18:51:19	0:06:00	Ação Bar Aberto Coca Cola	F. Saul	imagens live
18:57:19				
18:58:00	0:04:17	Publicidade 3	Video	
19:02:17				Final previsto do aquecimento
19:02:17	0:02:08	Resumo FC Porto Vintage x Real Valladolid	Video	
19:04:25	0:00:15	Promoção FC Porto Vintage x Deportivo	Jpeg+JL Branco	
19:04:40				
19:05:00	0:00:30	Coreografia bandeiras	Música das bandeiras	Coreografia bandeiras
19:05:30	0:03:00	Apresentação FC Porto	Grafismo + F. Saul	
19:09:00		Equipas entram em campo (FC Porto entra com crianças)	Hino FC Porto	11 cometas (efeito pirotecnico) lado nascente
		DF Ermesinde	Sponsor(Ibersol)-JL Branco	
19:15:00	0:45:09	Início 1ª parte		
		Gols + live público	F. Saul	
		Anuncio dos descontos		
20:00:00	0:04:00	Publicidade 4	Video	
20:04:00	0:00:30	Museu FC Porto	Video	
20:04:30	0:00:15	Museu - Dia do Estudante	JL Branco	
20:04:45	0:00:20	Produto de jogo	Jpeg+JL Branco	
20:05:05	0:00:15	DF Campo de férias Pascoa	Jpeg+JL Branco	
20:05:20	0:00:15	Revista Dragões	Jpeg+JL Branco	
20:05:35	0:01:45	Promoção '31 anos de presidência, 31 decisões'	Video	
20:07:20	0:02:42	Uprinter 3D - Making of	Video	
20:10:02	0:00:15	Promoção FC Porto Vintage x Deportivo	Jpeg+JL Branco	
20:10:17	0:00:15	Promoção FC Porto Vitalis x Águas Santas	Jpeg+JL Branco	
20:10:32	0:00:15	Promoção FC Porto x Benfica	Jpeg+JL Branco	
20:10:47	0:03:10	Resumo FC Porto x Napoli/Napoli x FC Porto	Video	
20:13:57			Sponsor(Ibersol)-JL Branco	
20:15:00	0:45:00	Início 2ª parte		
		Gols + live público	F. Saul	
		Anuncio dos descontos		
21:00:00		Anuncio MVP	Grafismo + JL Branco	
	0:00:15	Promoção FC Porto Vitalis x Águas Santas	Jpeg+JL Branco	
	0:00:15	Promoção FC Porto x Benfica	Jpeg+JL Branco	

## Sound logo design

## Sound collage with effect processing



# Mixdown



# Mastering

